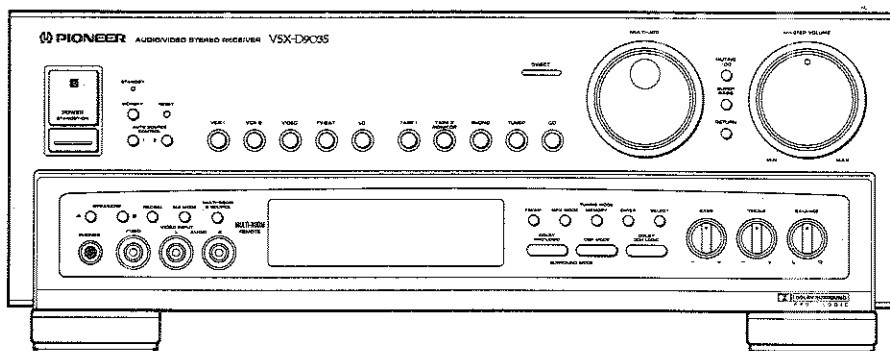


Operating Instructions

AUDIO/VIDEO STEREO RECEIVER

VSX-D903S

NTSC



Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

DEMO MODE

- The demonstration mode is activated by turning on the power switch while holding down the RETURN button (from power standby condition). The demonstration will appear on the display.
 - It finishes after about 10 minutes, but if you want to stop it part way through, press any button.
- The DEMO MODE can be switched on with GUI operation. (See page 38)

RETURN function

This function returns the unit to a set of initial settings and the tuner ready to receive a broadcast. This is helpful during troubleshooting or when no sound is output. For details, refer to "FRONT PANEL FACILITIES" on page 19.

RESET function

Set MASTER VOLUME to minimum before presetting the RESET button.

Use this function when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation switches are pressed. Press the RESET button to return to normal operating conditions.

Only in the case of television formatted in NTSC, the GUI (Graphic User Interface) mode can be used. Because this unit's GUI display signal is NTSC, automatic switching to the GUI mode may not be possible with other TV systems. If this problem arises, refer to the TV's operating manual.

IMPORTANT



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



CAUTION:

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNING — All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

WATER AND MOISTURE — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION — The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING — The appliance should not be mounted to a wall or ceiling.

VENTILATION — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION — If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzene, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES — An outdoor antenna should be located away from power lines.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE — The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the appliance.
- The appliance has been exposed to rain.
- The appliance does not appear to operate normally or exhibits a marked change in performance.
- The appliance has been dropped or the enclosure damaged.

SERVICING — The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

OUTDOOR ANTENNA GROUNDING — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A.

CART — An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



NEC — NATIONAL ELECTRICAL CODE

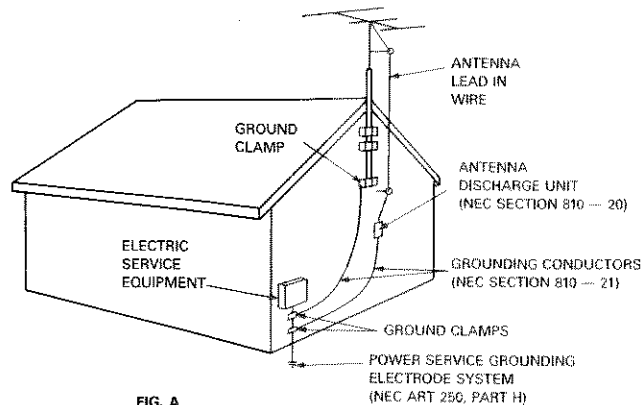


FIG. A

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

CONTENTS

BEFORE OPERATING

BEFORE OPERATING, ADJUST THE POSITION OF THESE SWITCHES	4
ACCESSORY ITEMS	4
SURROUND EFFECT	5
DOLBY 3CH LOGIC	6
DOLBY PRO-LOGIC SURROUND, DOLBY 3CH LOGIC, PRO LOGIC THEATER CENTER MODE	6
SPEAKER INSTALLATION	6

CONNECTION CHART

BEFORE CONNECTIONS	7
BASIC AUDIO SYSTEM CONNECTIONS	8
BASIC VIDEO SYSTEM CONNECTIONS	9
SPEAKERS CONNECTION	10
APPLICATIONS	12
MULTI-ROOM CONNECTIONS	13

PANEL FACILITIES

REAR PANEL FACILITIES	15
FRONT PANEL FACILITIES	18
DISPLAY SECTION	21

OPERATIONS

OPERATING TUNER	22
TUNING INTO STATIONS	22
PRESET TUNING	22
RECEIVING FM SIMULCAST TV PROGRAMS	23
OPERATING THE AUDIO/VIDEO COMPONENTS	23
PLAYBACK	23
RECORDING WITH A CASSETTE DECK	24
VIDEO RECORDING	24
SURROUND EFFECT AND DOLBY 3CH LOGIC	25
USING THE VIDEO SIGNAL SELECTOR	25
USING THE AUTO SOURCE CONTROL	26
USING MULTI-ROOM AND SOURCE (MR & S)	27

HINTS FOR BETTER RECEPTION	28
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REMOTE CONTROL OPERATION

PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT	29
REMOTE CONTROL RANGE	29
OUTLINE OF BUTTON LAYOUT	29
RECEIVER CONTROL BUTTONS	30
OPERATING OTHER COMPONENTS	31
VCR 1 OPERATION	31
LD PLAYER OPERATION	32
TV OPERATION	32
CD PLAYER OPERATION	33
TUNER OPERATION	33
DECK I, II OPERATION	34
DAT OPERATION	34
MODE CHECK BUTTON	34
PROGRAMMING	34
LEARN	34
EDIT	35
RETURNING TO THE INITIAL SETTINGS	37

GUI OPERATION

OPERATING USING GUI	38
(Graphic User Interface)	
OPERATING TUNER	39
MANUAL/AUTO TUNING	39
PRESET TUNING	39
STATION ENTRY	40
CUSTOM SEARCH	40
SCAN	40
OPERATING CD PLAYER	41
CD SET UP	41
DISC ENTRY	43
SEARCHING FUNCTION	44
PROGRAM PLAYBACK	45
OPERATING OTHER COMPONENTS	46
S.F.C. (Sound Field Control) MODE OPERATION	47
OTHER OPERATIONS	48
TROUBLESHOOTING	50
SPECIFICATIONS	52

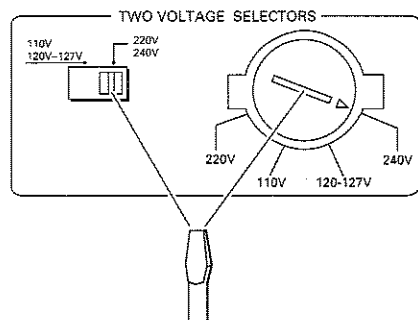
BEFORE OPERATING, ADJUST THE POSITION OF THESE SWITCHES

TWO VOLTAGE SELECTOR SWITCHES

Only multi-voltage models are provided with these switches. U.S. and Canadian models are not provided with these switches. Main voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with 110 V setting in Saudi Arabia.

The line voltage selector switches are on the rear panel. Before your model is shipped from the factory, these switches are set to the power requirements of the destination. Check that they are set properly before plugging the power cord into the household wall socket. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switches as follows.

1. Use a medium-size screwdriver.
2. First, insert a screwdriver in the groove of the voltage selector at the right, and adjust so that the tip of the groove points to the voltage value of your area.
3. Next, insert a screwdriver in the groove of the voltage selector at the left and adjust until the voltage is the same as at the right.



Medium-size screwdriver

CAUTION: TWO VOLTAGE SELECTORS				
AC 110V		AC 120-127V		AC 220V
110V		120-127V		220V
110V		120-127V		220V

NOTE:

Both switches must be in the same switch setting; otherwise, unit can be damaged.

CHANNEL STEP/FM DE-EMPHASIS SWITCH

(Not available on U.S. and Canadian models)

The unit has been factory-preset to the channel allocation and de-emphasis value for the area in which it is to be sold. If these values are set incorrectly, the frequency display may stop at the wrong frequency, or sound may be distorted, resulting in an inability to reproduce reception signals at their proper sound quality. For this reason, be sure to confirm that the values are set correctly before first using the unit.

[FM 100 kHz/75 μ s, AM 10 kHz] position:

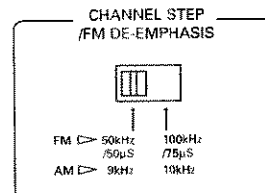
Set to this position for areas with an FM reception step of 100 kHz, de-emphasis 75 μ s and AM 10 kHz.

[FM 50 kHz/50 μ s, AM 9 kHz] position:

Set to this position, for areas with an FM reception step of 50 kHz, de-emphasis 50 μ s and AM 9 kHz.

NOTE:

When unsure about the channel allocation and de-emphasis values of your area, consult your dealer for correct information.



ACCESSORY ITEMS



FM T-type Antenna



AM Loop Antenna



Audio/Video programmable remote control unit



Alkaline dry cell battery x 2 (size "AA" (LR6/AM-3))

SURROUND EFFECT

This unit is equipped with DOLBY PRO-LOGIC SURROUND. There is also a DSP (Digital Signal Processor), with a choice of five SFC (Sound Field Control) simulated surround settings.

• SIMULATED SURROUND:

The "SIMULATED SURROUND" creates effects of reverberated and reflected sound from the walls and ceiling similar to a concert hall. These sound-effects added to the actual sound from the source make you feel as if you were in a more expanded space. The different ranges of the expanded space can be set by the DELAY TIME button.

Set the Delay Time to 16 ms or 20 ms for a live-house concert. For chamber music, set to 20 ms. For orchestral music, set to 30 ms. The "SIMULATED SURROUND" also gives effects on monaural sources by outputting the reverberated sound from rear speakers while keeping the output sound from front speakers as it is. Turn on the "SIMULATED SURROUND" for a monaural source to gain effective surround playback.

• JAZZ:

This gives you the sound field of a jazz club.

• DANCE:

A "hot" high-energy sound, with extra reverb for greater ambience.

• HALL:

You can enjoy a convincing hall sound.

• PRO LOGIC THEATER

Use with video software bearing the  DOLBY SURROUND mark. The feeling of movement, and outstanding stereo imaging offered by DOLBY PRO-LOGIC SURROUND, together with an atmosphere of a movie theater assure an incredible ambience.

• DOLBY* PRO-LOGIC SURROUND

Choose this setting for movies and music (especially Video Discs and video tapes bearing the  DOLBY SURROUND mark) playback.

DOLBY PRO-LOGIC SURROUND continuously detects the size and direction of the dominant signal and cancels undesirable crosstalk, thereby providing signal emphasis.

You can clearly perceive the directions and source of the music. Real flow of sound can also be re-created naturally using this feature. It gives the feeling of being in an outstanding and expansive sound field.

When using DOLBY PRO-LOGIC SURROUND, a delay time setting of 20 ms is commonly used. Use a different setting if you prefer.

Even if they do not bear the  DOLBY SURROUND mark, some video recordings may be Dolby Surround encoded.

Choose the SIMULATED SURROUND mode if the source sound signal is mono. Little or no sound will be heard from the surround speakers if the DOLBY PRO-LOGIC SURROUND mode is selected. With DOLBY PRO-LOGIC SURROUND, monaural source sound will be heard only from the center channel at settings other than the PHANTOM position.

Note:

Dolby Surround will not operate correctly if the signal passes through a graphic equalizer.

When using Dolby Surround, turn off the TAPE 2 MONITOR or set the graphic equalizer for flat response or to its "through" (or off) setting, if you have one in use.

*

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*

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DOLBY 3CH LOGIC

Combining the rear speaker signal with that of the front speakers results in your being able to enjoy a regenerated sound field which has comparatively more presence and a more expansive feeling from the front 3 channels (front L, front R, and center speakers) than that of ordinary stereo regeneration.

DOLBY 3CH LOGIC can be used with stereo sources not encoded with DOLBY SURROUND.

DOLBY PRO-LOGIC SURROUND, DOLBY 3CH LOGIC, PRO LOGIC THEATER CENTER MODE

You can choose from the following settings:

Center Mode Choices:

When using a center speaker:

- **NORMAL** — Low range frequencies, which have little effect on directionality and positioning, are routed to the left and right front speakers. So you can use a relatively small size speaker as the center speaker.
- **WIDE** — If you use a large size center speaker, choose this setting. The full frequency range of the Dolby Surround center channel, from low to high, is routed to the center speaker.

When not using a center speaker: DOLBY PRO-LOGIC SURROUND, PRO LOGIC THEATER

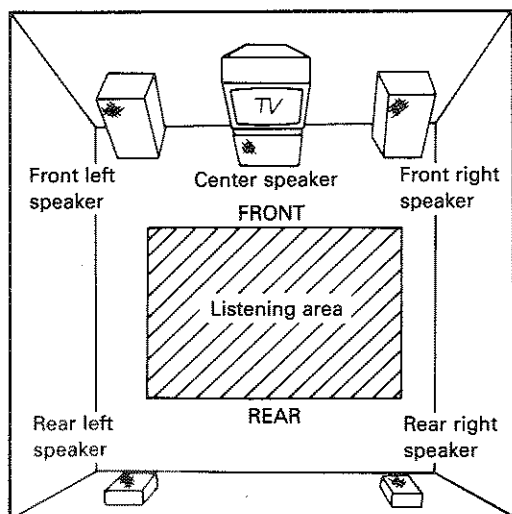
- **PHANTOM** — The signal which would have been sent to the center speaker is divided equally between the left and right front speakers.

With DOLBY PRO-LOGIC SURROUND, monaural source sound will be heard only from the center channel at settings other than the PHANTOM position.

SPEAKER INSTALLATION

To get the most out of the surround system, place the speakers as shown below.

An example of speaker positioning



If the rear speakers are positioned at an extreme distance, the surround level becomes unable to adjust and the surround effect will not be fully achieved.

NOTE:

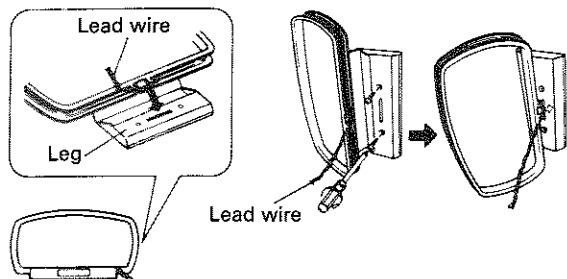
- To avoid interference with the picture on a nearby TV set, use magnetically shielded speaker systems. This is particularly important for the center speaker since it is usually located closest to the TV.
- Position the left and right channel speakers at equal distances from the TV set and approximately 1.8 m (6 feet) from each other.
- Position the center speaker above, below, or behind the TV set. Sound may not appear to coincide with the picture if you position it next to the TV set.
- Rear speakers are best positioned slightly above ear level.

CONNECTION CHART

BEFORE CONNECTIONS

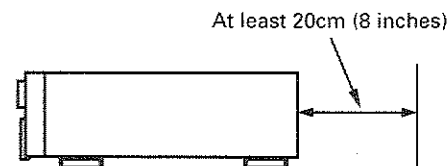
Setting Up the AM Antenna

- Insert the claw on the bottom of the antenna into the groove in the leg.
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.
- Use the attachment hole in the leg to screw to wall or other location, then insert the claw on the bottom of the antenna into the groove in the leg (affixing the antenna in the direction that gives the best reception).



Installation Precautions

- The rear panel vents are designed to prevent internal temperature rise. Be careful that curtains or other items do not block the vents.
- To improve heat dispersion, set the unit so that it is at least 20 cm (8 inches) away from the wall.

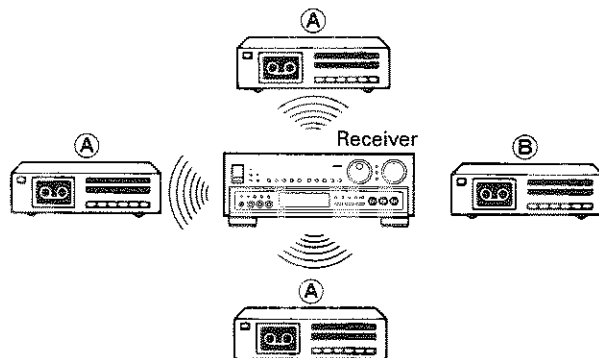


POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

Precaution regarding installation position of cassette deck

If the cassette deck is installed in the (A) positions as shown in the drawing below, it may be adversely affected during playback. If possible, it is better to install it in the (B) position.



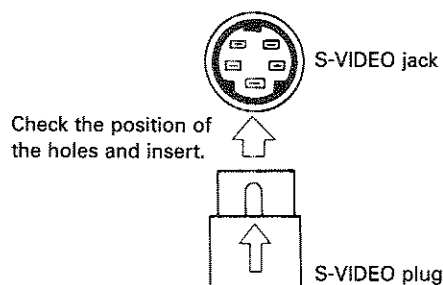
THE S-VIDEO CONNECTORS

When using a VCR 1, LD and TV monitor which has S-VIDEO connectors, they can be connected to the S-VIDEO connectors. For the operation of components connected to S-VIDEO connectors, refer to the instruction manuals of the corresponding components.

NOTE:

- In this unit, the S-VIDEO connectors (Y-C separate) and the regular pin jacks are independent, so any signal input through a pin jack must be output from the pin jack, and any signal input through an S-VIDEO connector must be output through the S-VIDEO connector.
- The S-VIDEO connector is for video portion only, so be sure also to make audio connections.

How to use S-VIDEO connectors



For the method of switching the TV monitor S-VIDEO connector/VIDEO jack, refer to the TV monitor's instruction manual.

CONNECTION CHART

BASIC AUDIO SYSTEM CONNECTIONS

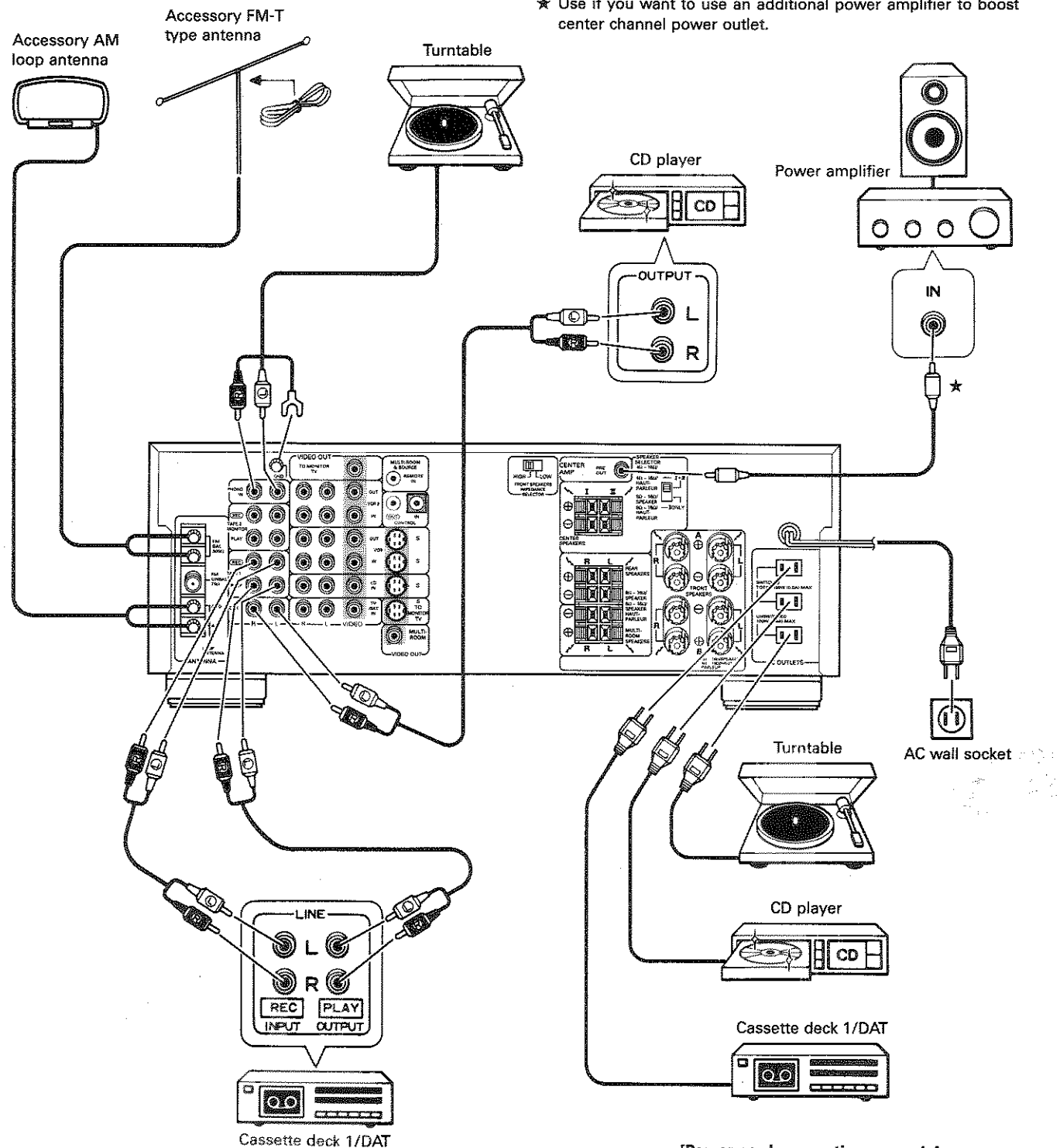
Illustration shows U.S. and Canadian model.

NOTE FOR FM T-TYPE ANTENNA:
Stretch the antenna out to its full length, and affix it to a wall, etc.

NOTE FOR AM LOOP ANTENNA:
The antenna should be placed at a distance from the receiver, and should not be allowed to touch metallic objects.

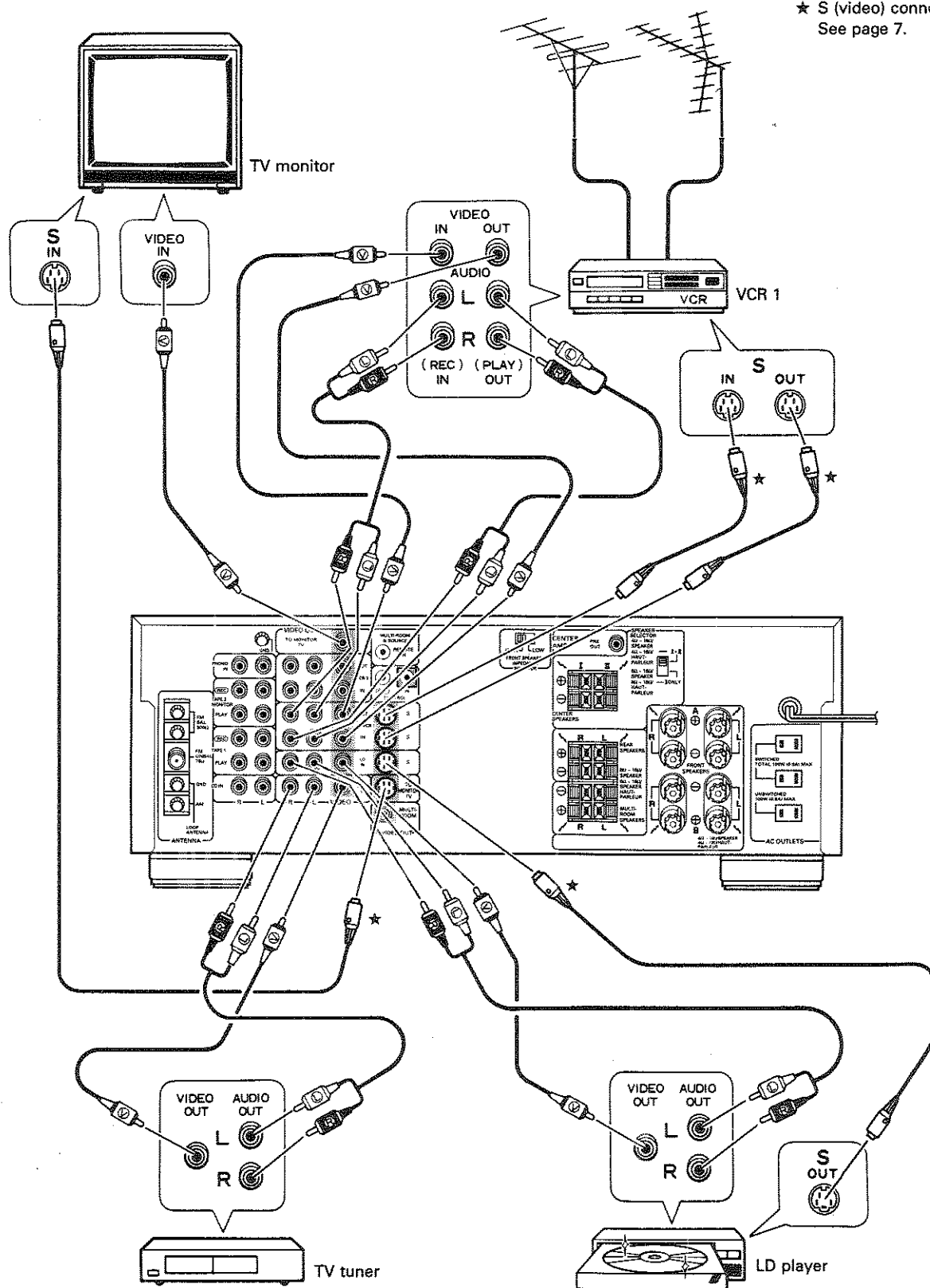
Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

★ Use if you want to use an additional power amplifier to boost center channel power outlet.



BASIC VIDEO SYSTEM CONNECTIONS

★ S (video) connection.
See page 7.



CONNECTION CHART

SPEAKERS CONNECTION

- Front L, R speakers
- Front center speaker
- Rear L, R speakers

When connecting speakers to the FRONT SPEAKERS B terminals, the procedure is the same as that used for connecting speakers to the FRONT SPEAKERS A terminals.

NOTE:

- Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
- If you have one pair of speakers only, connect it to front speaker terminals A or B.

Front speakers impedance

Set the FRONT SPEAKERS IMPEDANCE SELECTOR switch to the nominal impedance of your speakers.

• Position HIGH

A or B (1 pair)	8 Ω to 16 Ω
A and B (2 pairs)	

• Position LOW

A or B (1 pair)	4 Ω to 16 Ω
A and B (2 pairs)	8 Ω to 16 Ω

Center speaker impedance

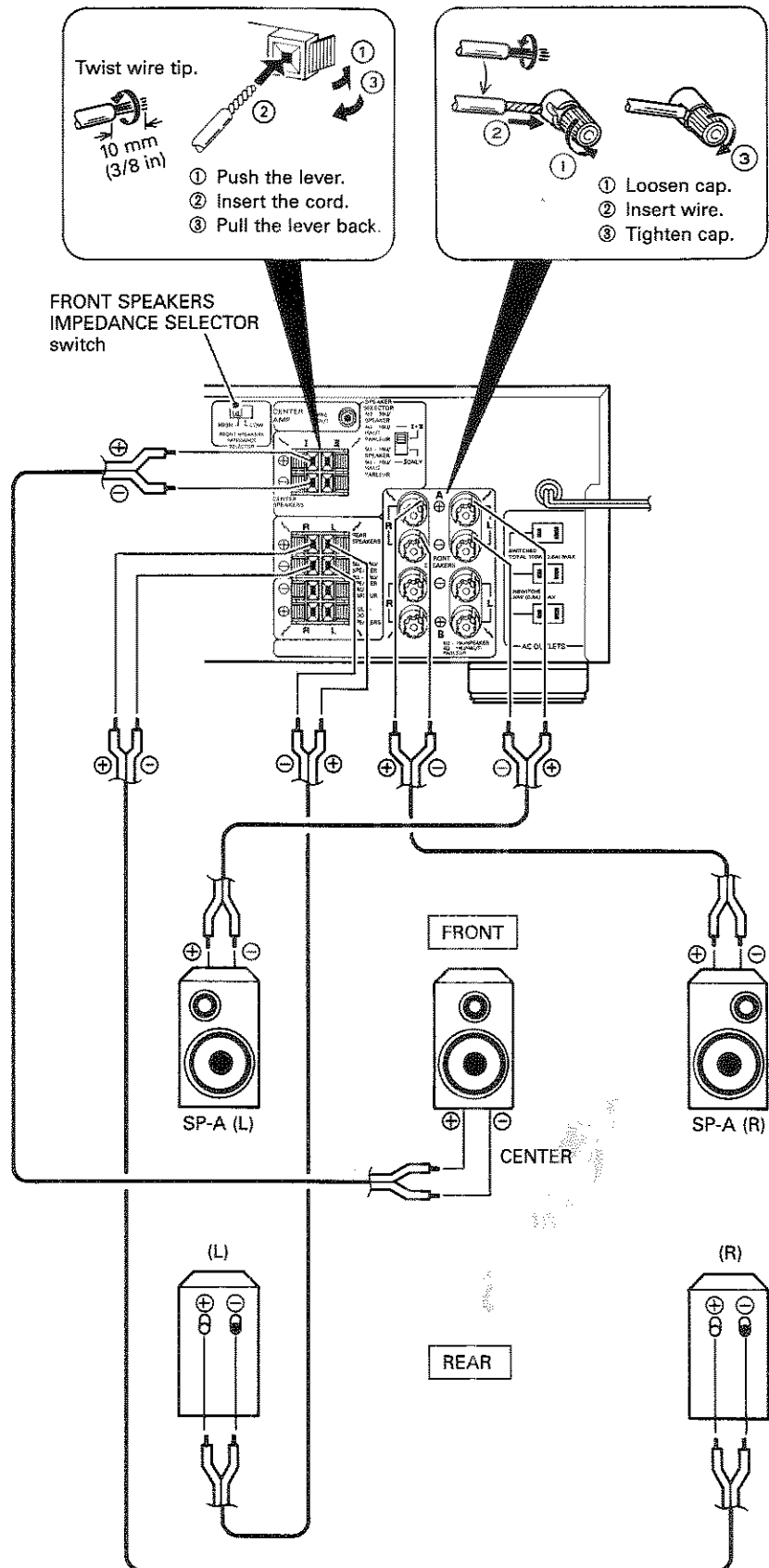
Connect a center speaker system with a nominal impedance of between 8 Ω and 16 Ω .

Rear speakers impedance

Connect rear speaker systems with a nominal impedance of between 8 Ω and 16 Ω .

NOTE:

Be sure to observe speaker polarity.

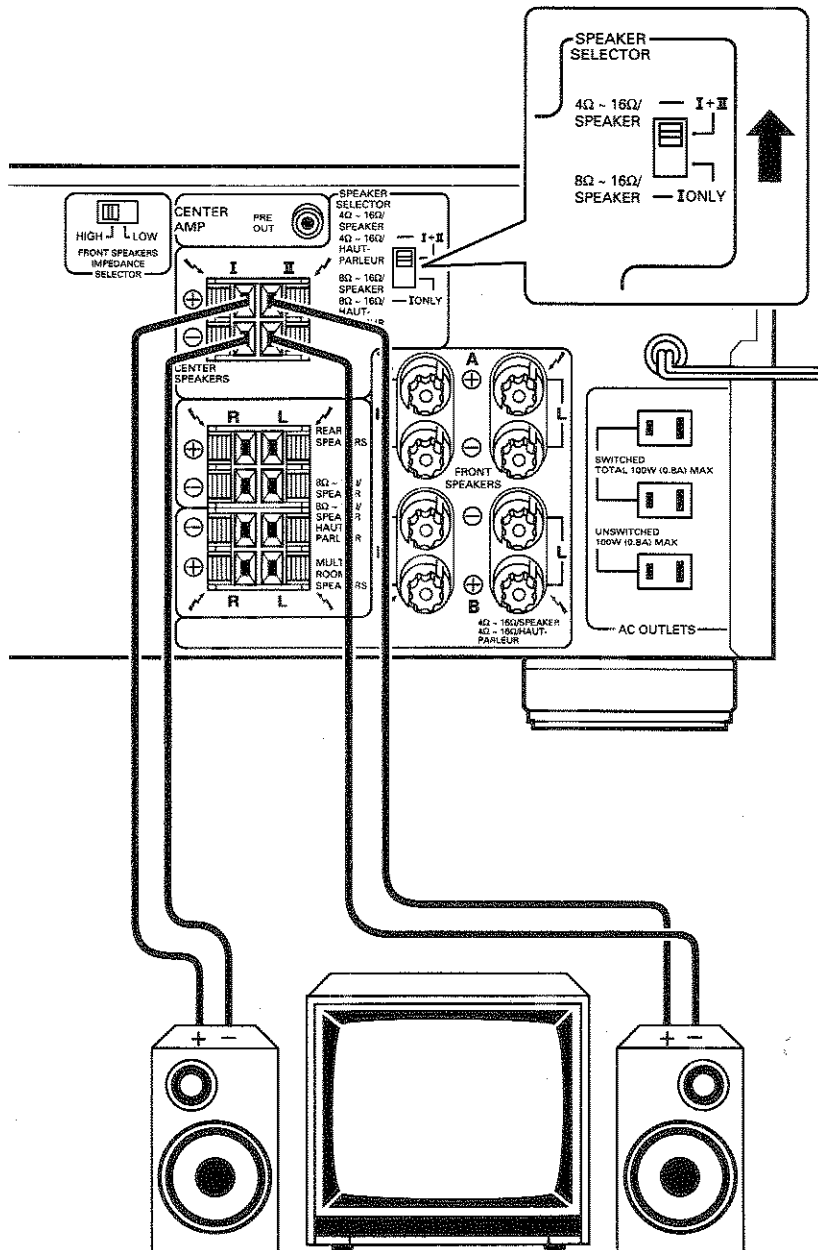


• Connecting Two Center Speakers for Dual Center

There are two terminals for center speaker on the main unit, so you can connect two speakers. When you cannot install a speaker under or behind your TV, installing speakers either side of the TV as a center speaker is just as effective.

When the speaker selector switch is in the "I + II" position, be sure to connect two speakers. If only one speaker is connected, there will be no sound.

Both speaker systems should have impedance of from 4 Ω to 16 Ω .



CONNECTION CHART

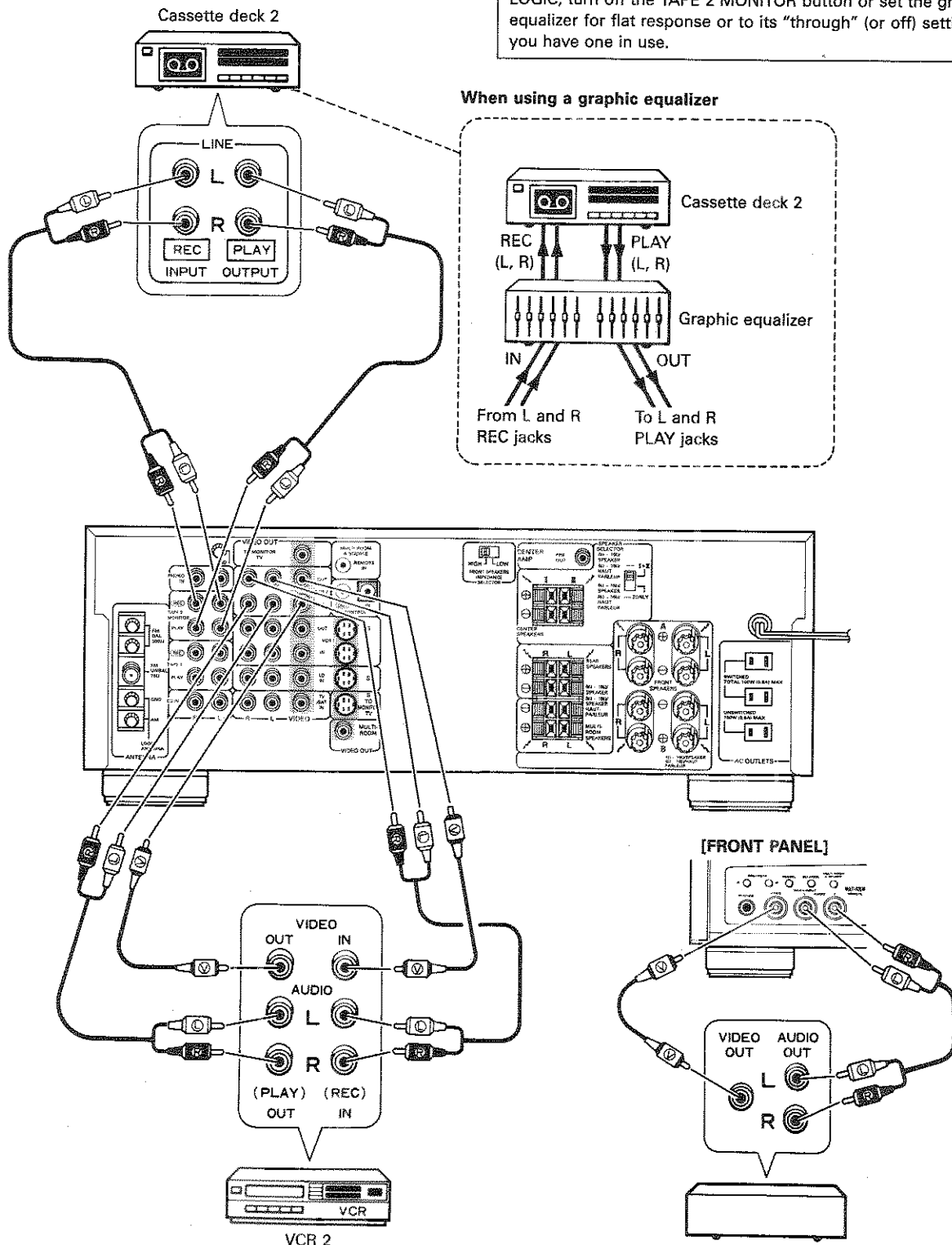
APPLICATIONS

Additional Audio and Video Components

NOTE:

DOLBY PRO-LOGIC SURROUND, PRO LOGIC THEATER and DOLBY 3CH LOGIC will not operate correctly if the signal passes through a graphic equalizer.

When using DOLBY PRO-LOGIC SURROUND or DOLBY 3CH LOGIC, turn off the TAPE 2 MONITOR button or set the graphic equalizer for flat response or to its "through" (or off) setting, if you have one in use.



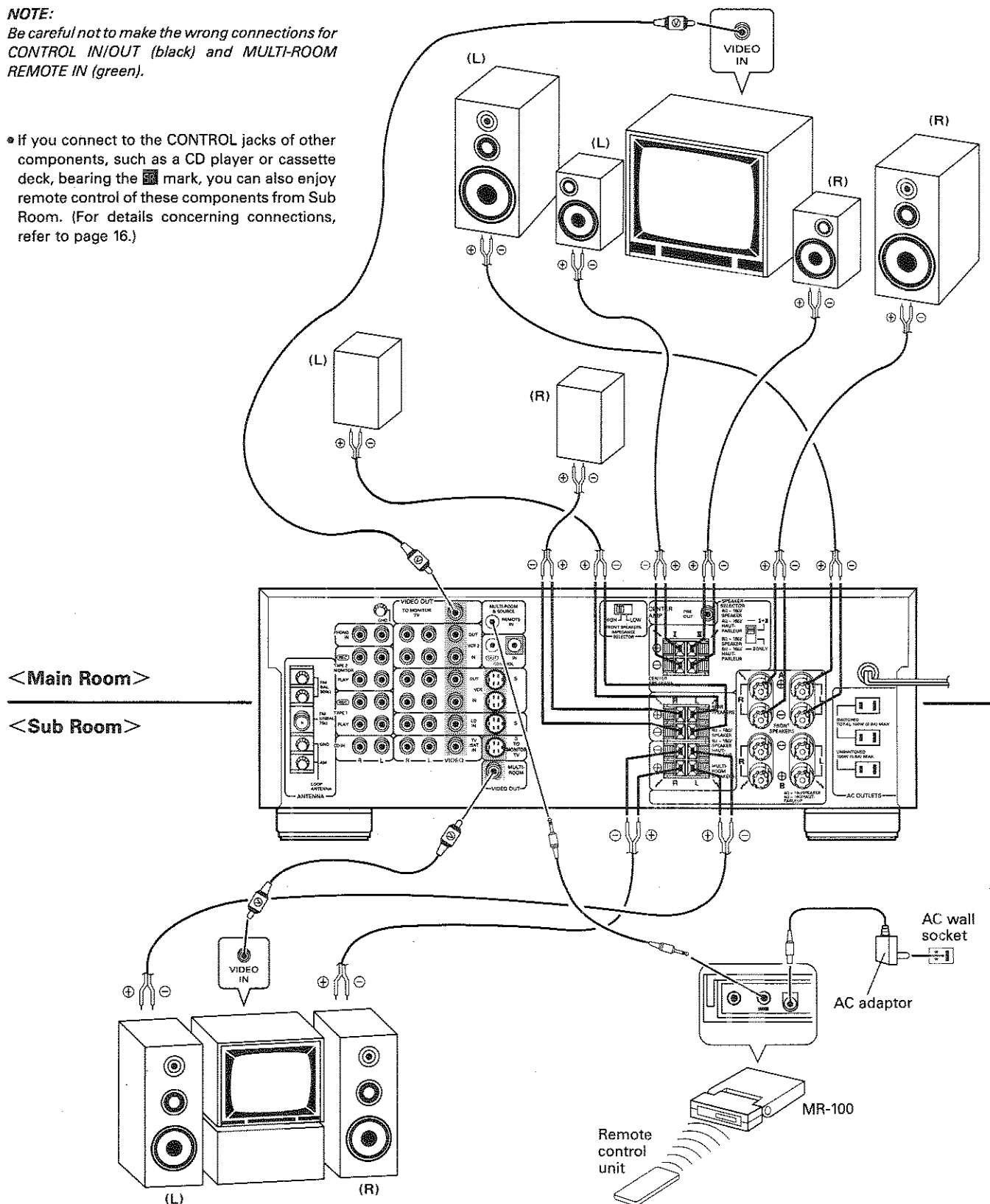
VCR (for playback only), or another component such as a TV camera.

MULTI-ROOM CONNECTIONS

NOTE:

Be careful not to make the wrong connections for **CONTROL IN/OUT** (black) and **MULTI-ROOM REMOTE IN** (green).

- If you connect to the **CONTROL** jacks of other components, such as a CD player or cassette deck, bearing the  mark, you can also enjoy remote control of these components from Sub Room. (For details concerning connections, refer to page 16.)

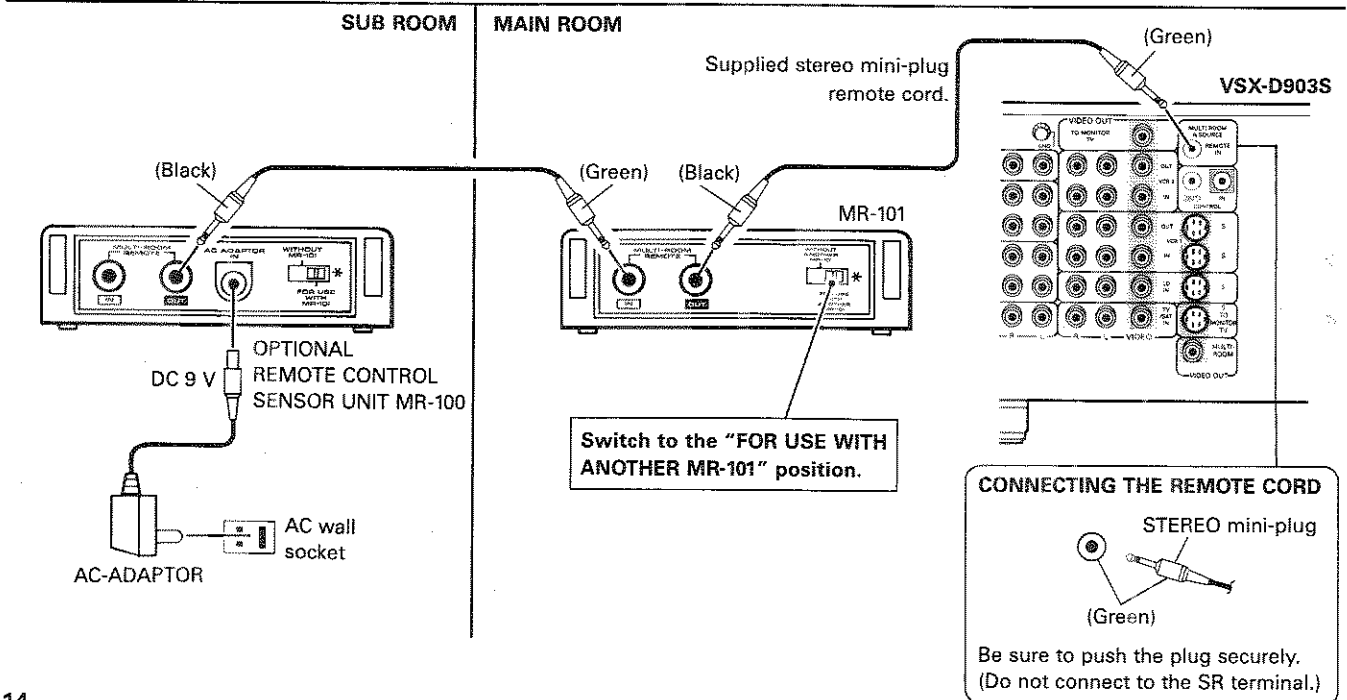
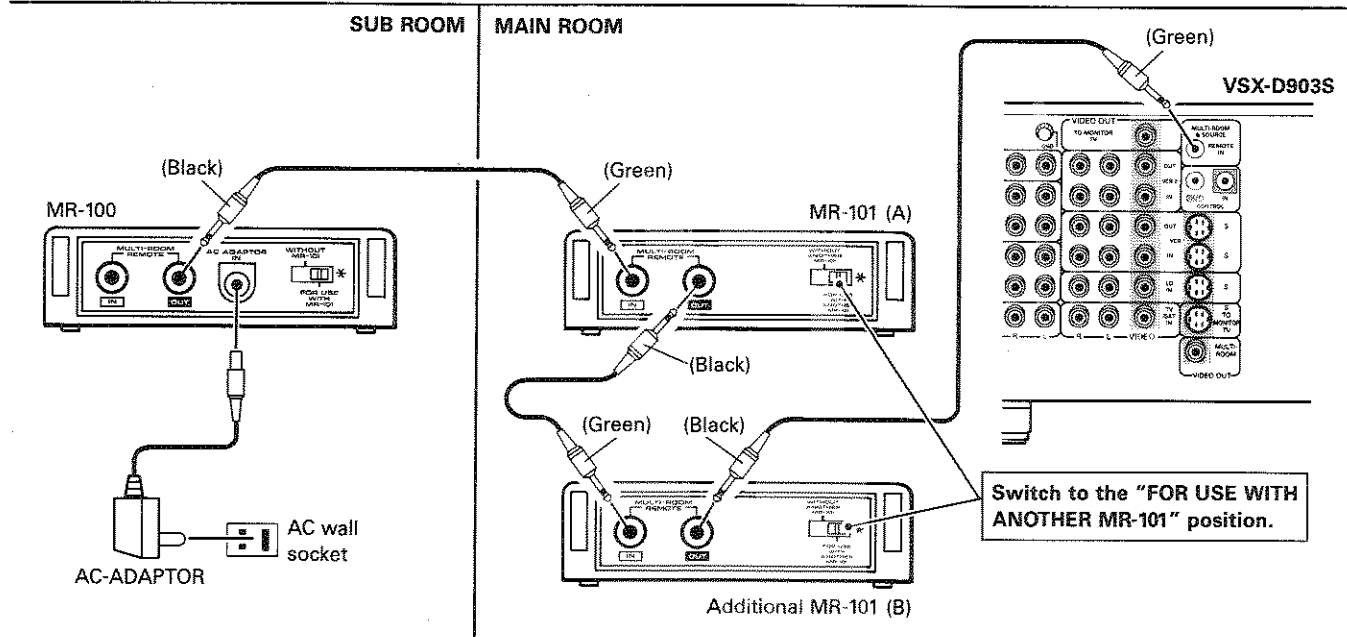


CONNECTION CHART

Precautions concerning Multi-Room & Source operation

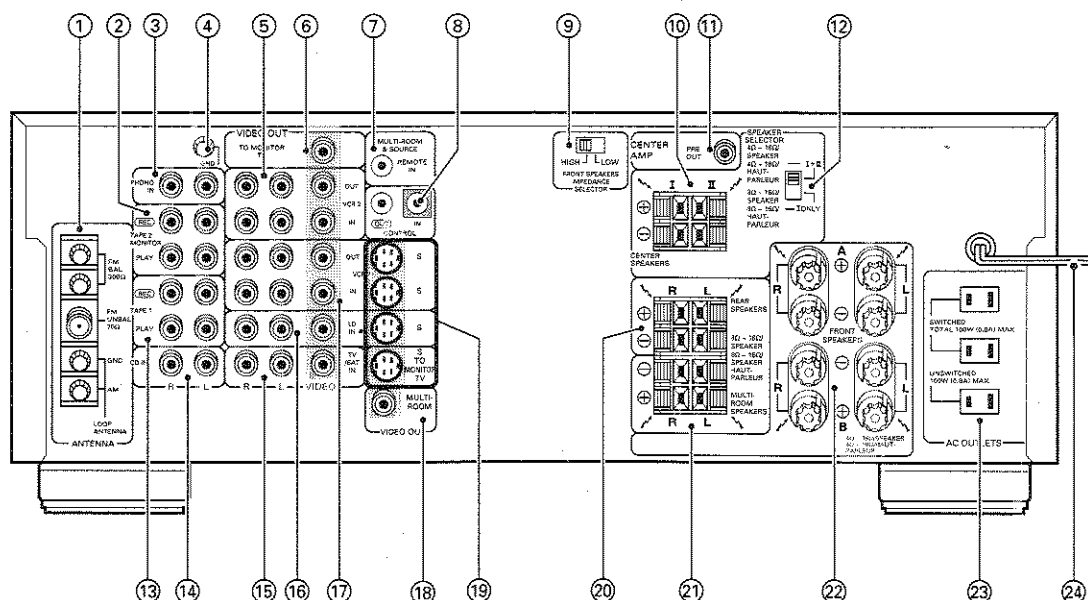
When using this unit with the MR-100 multi-room system remote control sensor unit and MR-101 multi-room system remote control emitter for Multi-Room & Source operation, even when not using another MR-101, be sure to set the slide switch on the MR-101 rear panel to the "FOR USE WITH ANOTHER MR-101" position. Correct operation will not be possible if the switch is in the "WITHOUT ANOTHER MR-101" position.

- While using rear speakers in the main room, you can also enjoy Multi-Room & Source operation by using the MULTI-ROOM AUDIO OUT jacks. In this case, an amplifier is necessary for the sub room.



REAR PANEL FACILITIES

*Illustration shows U.S. and Canadian model.



① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

② TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

③ PHONO input jacks

Connect to the output cables from a turntable.

④ GND terminal

Connect the turntable ground lead to this terminal.

⑤ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1, TV, VIDEO (front) or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1, TV, VIDEO (front) or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑥ VIDEO OUT (TO MONITOR TV) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2, TV, VIDEO (front) or LD player connected to this unit.

⑦ MULTI-ROOM & SOURCE REMOTE IN jack

When using the MULTI-ROOM & SOURCE function, connect to the separately sold MR-100 Multi-Room remote control unit. (See pages 13, 14.)

REAR PANEL FACILITIES

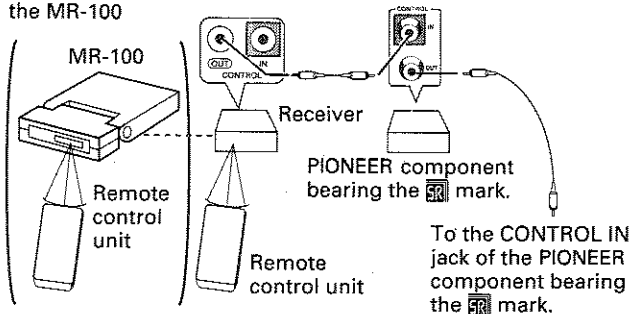
⑧ CONTROL IN/OUT jacks

- IN** : Connect this jack to other PIONEER components (main unit or remote control unit) when using those components to control this unit.
- OUT** : Connect this jack to other PIONEER components when using the remote control of this unit to control the other components.

NOTE:

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.

When using the MR-100



⑨ FRONT SPEAKERS IMPEDANCE SELECTOR switch

(See page 10)

Set this switch to match the nominal impedance of your front speakers.

NOTE:

Turn off the receiver's power before changing the impedance selector switch setting.

⑩ CENTER SPEAKERS terminals (See page 10)

Connect the center speaker to these terminals.

You can connect two speakers for dual center, so you can locate speakers on both sides of the TV.

Speaker impedance:

Refer to ⑫ CENTER SPEAKER SELECTOR switch.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

⑪ CENTER AMP PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

⑫ CENTER SPEAKER SELECTOR switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.

When only one speaker is connected:

Be sure to set the switch to "I ONLY" (down side), and always connect a speaker with an impedance of $8\ \Omega$ — $16\ \Omega$ to the I terminal.

When two speakers are connected:

Be sure to set the switch to "I + II" (up side), and always use speaker with an impedance of $4\ \Omega$ — $16\ \Omega$.

NOTE:

Switch the CENTER SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is at ON.

⑬ TAPE 1 jacks

Use these to connect the cassette deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 1 jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck to the PLAY side of the TAPE 1 jack on the receiver with a pin plug connecting cord.

⑭ CD input jacks

Connect to the output jacks of a compact disc player.

⑮ TV/SAT (Satellite) jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑯ LD jacks

[VIDEO IN]

When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L,R)]

When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

⑰ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2, TV, VIDEO (front) or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2, TV, VIDEO (front) or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑱ MULTI-ROOM VIDEO OUT jack

Connect the monitor TV for use in the Sub room.

⑲ S (connector) video jacks

When used in conjunction with a VCR, Video disc player (LaserDisc player), or TV monitor equipped with S video jacks, connect to these jacks. (See pages 7, 9)

⑩ REAR SPEAKERS terminals (See page 10)

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

Use rear speakers with impedance of 8 Ω — 16 Ω .

⑪ MULTI-ROOM SPEAKERS terminals

Connect to the Multi-room speakers.

Speaker impedance

Connect speaker systems with a nominal impedance of between 8 Ω and 16 Ω .

⑫ FRONT SPEAKERS terminals (See page 10)

A: Connect to the first set of speakers.

B: Connect to the second set of speakers.

Speaker impedance:

Refer to ⑨ FRONT SPEAKERS IMPEDANCE SELECTOR switch.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

⑬ AC OUTLETS

[U.S. and Canadian models]

[SWITCHED TOTAL 100 W (0.8 A) MAX]

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

[UNSWITCHED 100 W (0.8 A) MAX]

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).

[Multi-voltage model]

SWITCHED TOTAL 100 W MAX

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

UNSWITCHED 100 W MAX

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

NOTE:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*

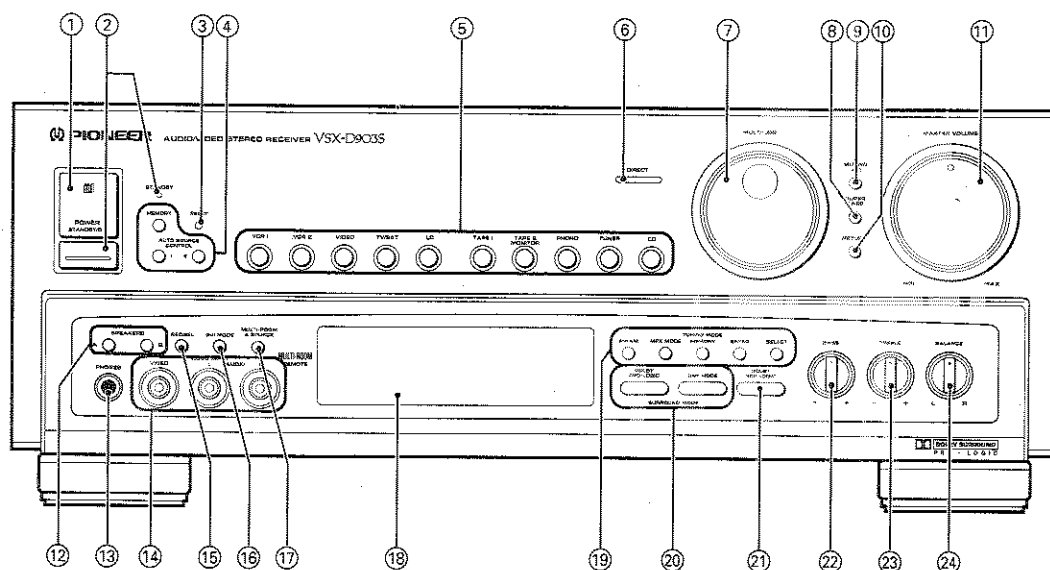
This can cause the receiver to malfunction.

CAUTION:

DO NOT CONNECT MONITOR OR TV SET.

⑭ Power cord

FRONT PANEL FACILITIES



① Remote sensor

② POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY : When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

③ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions. (The input selector automatically switches to TUNER, and SPEAKERS A and B switch off.)

If you press this button when the power is ON, the unit switches to POWER STANDBY.

④ AUTO SOURCE CONTROL/MEMORY buttons (See page 26)

1, 2 buttons:

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:

Use when memorizing settings to a 1, 2 button.

⑤ Input selector buttons

- VCR 1** : Press when performing playback on a first VCR unit.
VCR 2 : Press when performing playback on a second VCR unit.
VIDEO : Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.
TV/SAT : Press when using a TV tuner connected to the TV/SAT jacks.
LD : Press when performing playback on an LD player.
TAPE 1 : Press when performing playback on a cassette deck.
TAPE 2 MONITOR : Press when performing playback on a second cassette deck and when monitoring recording.
PHONO : Press when playing records on turntable.
TUNER : Press when listening to radio broadcasts.
CD : Press when playing compact discs on a CD player.

⑥ DIRECT button

Press this to listen to source sound without passing the audio signal through sound quality and balance adjusting circuitry. The surround mode, super bass, and rear and center speakers are automatically switched off.

⑦ MULTI-JOG

Use during tuner operation to select frequencies and station numbers. During GUI operation, use to move the on-screen cursor.

⑧ SUPER BASS button

Switch on when you want to boost bass. This does not operate when the DIRECT button is on.

⑨ MUTING button

Press to temporarily cut off the sound volume. When pressed again, the sound will return to its previous level.

⑩ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR OFF • FUNCTION TUNER
 • SURROUND MODE OFF • V-SIGNAL SELECTOR OFF
 • MUTING OFF

And SPEAKERS buttons switch as follows.

Before pressing the RETURN button		After pressing
Both A and B are off	→	Only A is on
Only A is on	→	No change
Only B is on	→	Both A and B are on
Both A and B are on	→	No change

NOTE:

Press the RETURN button, and the frequency last selected is received. If reception of a station is not possible with that frequency, the mode automatically switches to AUTO TUNING.

⑪ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

⑫ SPEAKERS buttons (A, B)

ON/OFF switches for the A and B speaker systems. (Indicator in the display section lights.)

⑬ PHONES jack

Connect the plug on your headphones to this jack. Set the surround mode and all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

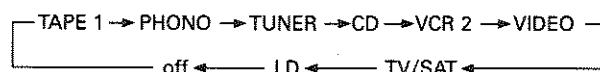
⑭ VIDEO INPUT jacks

VIDEO components such as a VCR or TV camera, etc. can be connected.

⑮ REC SEL (Recording Selector) button

You can select the component to be recorded from, on VCR 1 without using the input selector.

Each time you press the REC SEL button, the components change in the following order.



When the REC SELECTOR has been through all the components once, REC SELECTOR switches off.

⑯ GUI MODE button (See page 38)

Switches GUI MODE on and off.

⑰ MULTI-ROOM & SOURCE button

Use in combination with the separately sold MR-100 Multi-Room remote control unit.

When this button is on, the source selected with the input selector at that time is set to the Sub room function. The selected sub-function's sound is output through SUB ROOM SPEAKERS, and the video signal is output through the MULTI-ROOM VIDEO OUT jack. If you install speaker systems connected to the MULTI-ROOM SPEAKERS terminals in a different room, you can enjoy different sources in two different rooms with a single main unit.

⑱ Display section (See page 21)

FRONT PANEL FACILITIES

⑰ TUNING MODE buttons (See page 22)

FM/AM : Use this to switch between FM and AM frequency band reception.

MPX MODE : Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:

Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This button has no effect on reception of AM broadcasts.

MEMORY : Press this button to switch to the frequency preset mode.

ENTER : If you press this when in the frequency preset mode, the displayed frequency is memorized in the selected station. (Frequency and station indications flash and then light.)

SELECT : Press this to switch to the station mode. Then you can turn the MULTI-JOG to select a station.

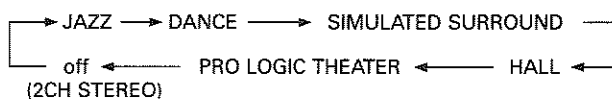
⑱ SURROUND MODE buttons (Pages 5, 25)

DOLBY PRO-LOGIC:

Switches DOLBY PRO-LOGIC SURROUND on and off.

DSP MODE:

Each time you press it, the mode and the display indications change as follows:



⑲ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the  **DOLBY SURROUND** mark.

⑳ BASS control

Use to adjust the low-frequency level. Turn clockwise to boost bass, and counterclockwise to attenuate bass. This does not operate when the DIRECT button is on.

㉑ TREBLE control

Use to adjust the high-frequency level. Turn clockwise to boost treble, and counterclockwise to attenuate treble. This does not operate when the DIRECT button is on.

㉒ BALANCE control

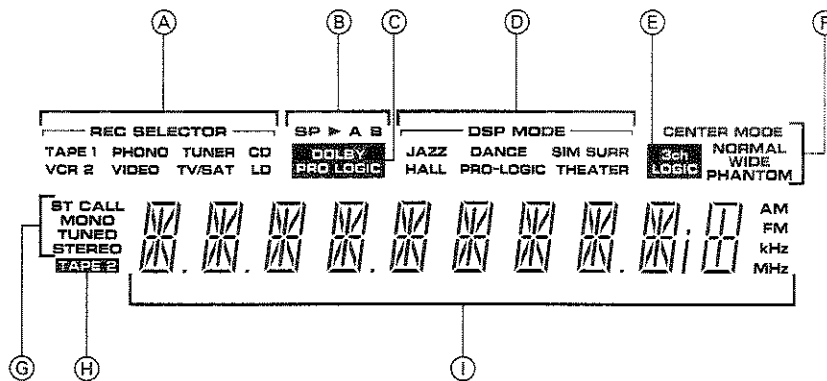
Use to adjust the sound volume balance between left and right speakers. This does not operate when the DIRECT button is on.

L: Decrease the sound on the right side.

R: Decrease the sound on the left side.

Usually, left and right volume levels should be the same.

DISPLAY SECTION

**Ⓐ REC SELECTOR indicators**

The recording source selected with the REC SEL button is usually displayed.

Ⓑ SP (SPEAKERS) A, B indicators

Shows which speaker system (or systems) are switched on.

Ⓒ DOLBY PRO LOGIC indicator**Ⓓ DSP MODE indicators****Ⓔ DOLBY 3CH LOGIC indicator****Ⓕ CENTER MODE indicators**

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO-LOGIC SURROUND, PRO LOGIC THEATER and DOLBY 3CH LOGIC operation (refer to pages 6, 47).

Ⓖ Tuning indicators**ST (STATION) CALL**

: Press the SELECT button to switch to the station mode, and this indicator lights.

MONO

: Lights up when the FM MONO mode is selected with the MPX MODE button.

TUNED

: Lights up when a station is tuned.

STEREO

: Lights up when a stereo FM broadcast is being received.

Ⓗ TAPE 2 indicator

Lights up when the input selector is set to TAPE 2 MONITOR on.

Ⓘ CHARACTER display

OPERATING TUNER

Press the POWER switch to the ON position.
Select TUNER with the input selector.
Be sure to turn the TAPE 2 MONITOR button OFF when listening to AM or FM broadcasts.
Switch ON the SPEAKERS button corresponding to the speakers being used.

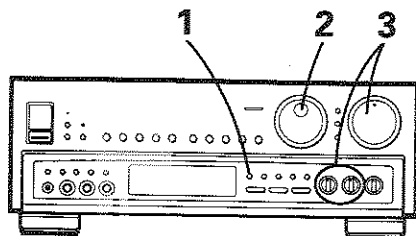
FM auto stereo reception and monaural reception

Each time you press the MPX MODE button, the MONO indicator in the display section lights or goes out.

- If an FM stereo broadcast is received when the MONO indicator is out, the STEREO indicator lights, and sound is in stereo.
 - If an FM stereo broadcast is received when the MONO indicator is lit, the sound will be monaural.
- If there is interference during STEREO mode reception, switch to MONO. The sound will become monaural but interference will be reduced.

TUNING INTO STATIONS

Turn the MULTI-JOG, and the tuning frequency changes. (Switch off when the GUI MODE button is on.) Turning in a clockwise direction raises the frequency, while turning in a counterclockwise direction lowers the frequency.



1. Use the FM/AM button to select either FM or AM.
 - When the "ST CALL" indicator is lit in the display, press the SELECT button to switch it off.
2. Turn the MULTI-JOG until you reach the frequency of a desired station.
 - When a station is received, the TUNED indicator will light up.

NOTE:

The TUNED indicator may not light with broadcasts received over long distances, or when the broadcast signals are extremely weak.

3. Adjust the volume and tone controls as desired.

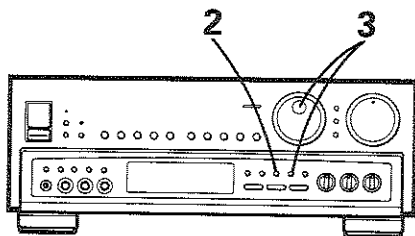
AUTO TUNING

Auto tuning is convenient when you do not remember the frequency of a desired station, or when you wish to find stations that you do not normally listen to.

Operate by remote control. Refer to page 33.

PRESET TUNING

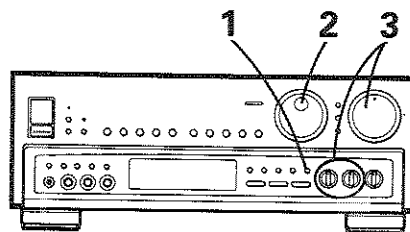
FREQUENCY PRESETTING



1. Tune into the desired station.
 - See the section "TUNING INTO STATIONS".
 - In addition to station frequencies, the MPX MODE (AUTO/MONO) can also be preset (FM only).
2. Press the MEMORY button.
 - The station number flashes in the display. (Memory mode)
3. Turn the MULTI-JOG to select the station you want to memorize, and press the ENTER button.
 - The station number lights in the display, indicating that it has been memorized.
 - If you do not press the ENTER button within about five seconds after selecting a station, the memory mode is canceled.
4. Repeat steps 1 to 3 to preset additional stations.

A total of 30 AM and FM stations may be preset. When you store a new preset, it takes the place of the previously stored station (if any).

LISTENING TO BROADCASTS USING PRESET TUNING



1. Press the SELECT button.
 - The "ST CALL" indicator lights in the display, and the mode switches to Station call.
2. Turn the MULTI-JOG to select a station.
3. Adjust the volume and tone controls as desired.

NOTE:

Even if the receiver power cord is unplugged, data remains in memory for a few days. If the contents of the memory are erased, preset once more.

Last station memory

When the POWER switch is pressed to turn the power on, the last station received before the power was previously turned off will be tuned in again.

When the power is ON, if the FM/AM button is pressed, the last station received before the FM/AM button was previously pressed will be tuned in again.

RECEIVING FM SIMULCAST TV PROGRAMS

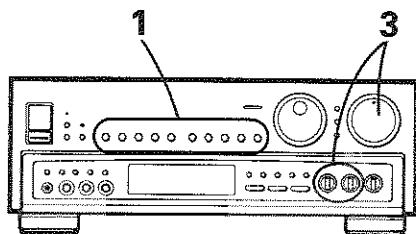
By combining a TV set and a VCR (or TV tuner), you can receive FM simulcast TV programs (stereo TV sound transmitted from an FM radio station) while viewing the video portion on your TV.

1. Select the desired TV program with the TV set.
2. Tune in the desired FM simulcast TV program on the receiver.
3. Adjust the volume and tone controls as desired.

OPERATING THE AUDIO/VIDEO COMPONENTS

Press the power switch to the ON position, and turn on the power to the other components you wish to use (for example, TV, VCR, cassette deck, etc.).

PLAYBACK



1. Use the input selector buttons to select the desired program source.

Program Source	Input Selector
To watch a video cassette tape on the VCR connected to VCR 1 jacks.	VCR 1
To watch a video cassette tape on the VCR connected to VCR 2 jacks.	VCR 2
To watch a VCR connected to VIDEO INPUT jacks of front panel.	VIDEO
To watch the TV picture from a TV tuner connected to the TV/SAT jacks.	TV/SAT
To watch a LaserDisc.	LD
To listen to a tape on the cassette deck connected to TAPE 1 jacks.	TAPE 1
To listen to a tape on the cassette deck (or digital audio tape deck) connected to TAPE 2 MONITOR jacks.	TAPE 2 MONITOR
To listen to records.	PHONO
To listen to compact discs.	CD

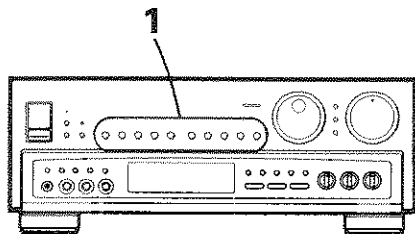
* If you select a music source other than TAPE 2, switch OFF the TAPE 2 MONITOR.

2. Operate the appropriate audio/video component to play back the program source.
 - For a video source, switch the TV connected to this unit to the video input mode.
3. Adjust the volume and tone controls as desired.
 - Refer to page 25 for details concerning surround operation.
 - Refer to page 47 for details concerning sound quality adjustment.

RECORDING WITH A CASSETTE DECK

RECORDING WITH TAPE 1

If the TAPE 2 MONITOR button is ON, press to turn OFF.



1. Select the source you want to record from with the input selector buttons.
 - When recording to AM or FM broadcasts, select a preset station using the MULTI-JOG. If the desired station has not been preset, tune in the station.
2. Start recording on TAPE 1 cassette deck.
3. Play the desired program source (record, compact disc, etc.).
 - The volume, balance, and tone controls have no effect on the recording.

RECORDING WITH TAPE 2

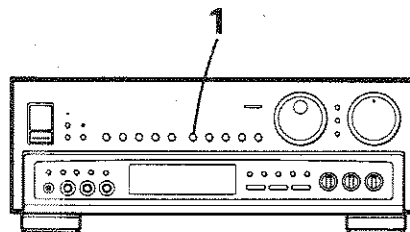
The REC SEL button does not operate with TAPE 2. The source selected by the input selector buttons can be recorded.

1. Select the source you want to record from with the input selector buttons.
2. Start recording on the TAPE 2 cassette deck.
3. Play the desired program source (record, compact disc, etc.).
 - The volume, balance, and tone controls have no effect on the recording.

USING VCR 1, VCR 2 FOR AUDIO RECORDING

The audio signal output from the VCR 1 and VCR 2 AUDIO OUT jacks is the same as that output from the TAPE 1 REC jacks, so you can record using the same procedure as for recording with TAPE 1.

COPYING TAPES



The following operations concern TAPE 1 to TAPE 2 copying.

1. Press the TAPE 1 input selector button.
2. Load the TAPE 1 cassette deck with a tape to playback.
3. Load the TAPE 2 cassette deck with a tape to record to.
4. Start recording on the TAPE 2 cassette deck.
5. Start playback on the TAPE 1 cassette deck.

The following operations concern TAPE 2 to TAPE 1 copying.

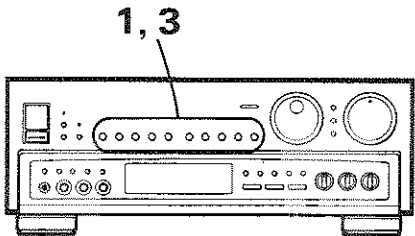
1. Select a source other than TAPE 1 with the input selector buttons.
2. Press the TAPE 2 MONITOR button to turn it ON.
3. Load the TAPE 2 cassette deck with a tape to play back.
4. Load the TAPE 1 cassette deck with a tape to record to.
5. Start recording on the TAPE 1 cassette deck.
6. Start playback on the TAPE 2 cassette deck.

Tape monitoring

When recording is performed on a cassette deck equipped with monitoring function, the recorded sound can be monitored through the speaker system by pressing the TAPE 2 MONITOR button to ON.

VIDEO RECORDING

Refer to the connection procedures on pages 5 to 10 and refer to the VCR's Operating Instructions regarding proper operation procedures. Recording can be performed on both VCR 1 and VCR 2.



When not using the REC SELECTOR

1. Select the source to record from with the input selector buttons.
 - When recording from a LaserDisc on VCR 1 or VCR 2 → LD
 - When recording from the TV tuner on VCR 1 or VCR 2 → TV
 - When recording from VCR 1 on VCR 2 → VCR 1
 - When recording from VCR 2 on VCR 1 → VCR 2
 - When recording on VCR 1 or VCR 2 from a component connected to the front panel VIDEO INPUT jacks → VIDEO

2. Begin recording on the VCR.

- For VCR, select a line input (external input).

3. Begin playback on the component selected with the input selector.

NOTE:

When recording with VCR 1, be sure the input selector is set to a position other than VCR 1. When recording with VCR 2, be sure the input selector is set to a position other than VCR 2.

When using the REC SELECTOR (VCR 1 only)

With the input selector buttons, you can select a component and a different recording source. For example, you can listen to a record while recording a CD.

1. Select the source you want to record from with the REC SEL (SELECTOR) button.

- When MULTI-ROOM & SOURCE is on, REC SEL does not operate, so switch the MULTI-ROOM & SOURCE button off.

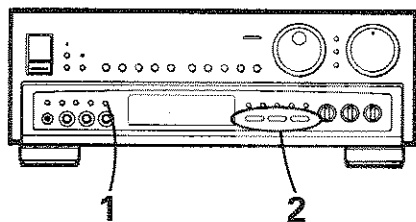
2. Start recording on VCR 1.

3. Start playback on the component selected with the REC SEL button.

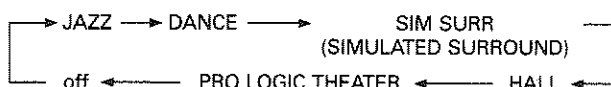
NOTE:

When using the REC SEL button, do not select the component that you are using for recording audio on (VCR 1) with the input selector.

SURROUND EFFECT AND DOLBY 3CH LOGIC



1. **Switch the MULTI-ROOM & SOURCE button off.**
When MULTI-ROOM & SOURCE is on, surround does not operate.
2. **Select the desired mode with the DOLBY PRO-LOGIC button, DSP MODE button, and DOLBY 3CH LOGIC button.**
 - The DSP MODE changes in sequence each time the DSP MODE button is pressed. (The DSP indicator lights.)



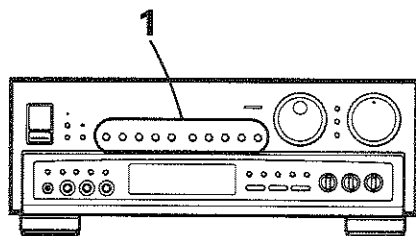
3. **Adjust levels to achieve a correct surround sound reproduction.**
This is done using GUI (page 38). For details concerning how to perform level adjustment refer to page 47.

SETTING THE DELAY TIME

When using DOLBY PRO-LOGIC SURROUND or SIMULATED SURROUND, you can set the delay time between 16 ms and 30 ms (2 ms step). The standard setting is 20 ms, but you can select any setting of your choice.

When you press the DELAY TIME button on the remote control, the current delay time is displayed. Pressing it again changes the delay time.

USING THE VIDEO SIGNAL SELECTOR



This function can be used to allow you to listen to the playback sound while changing the video image only, thus allowing you to playback and record video images different from the playback sound source.

1. **Select the component you want to listen to with the input selector buttons.**
 - When listening to (or recording) AM or FM broadcasts, select a preset station. If the desired station has not been preset, tune in the station.
2. **Select the video component you want to watch with the V.SEL (VIDEO SIGNAL SELECTOR) button on the remote control unit.**
 - It is indicated in the display section.
3. **Start playback of the component selected with the input selector buttons, and the component selected with the V.SEL button.**

[Recording to a VCR]

Carry out the following after completing procedure 3.

- ① **Confirm that the REC SEL button is off.**
 - If the REC SELECTOR indicator is lit, press the REC SEL button to the off mode.
- ② **Insert a video cassette tape into the VCR to be used for recording.**
- ③ **Set the recording VCR to the recording mode.**
- ④ **Start playback of the component selected with the input selector buttons, and the component selected with the V.SEL button.**

CAUTION:

If you must operate the V.SEL button on the remote control unit during recording, do so after setting the recording VCR to the pause mode. If the button is operated when the tape is traveling during recording, the recorded image and sound may be disrupted at the point at which the button is operated.

USING THE AUTO SOURCE CONTROL

You can memorize receiver settings, and recall at the touch of a button.

Two memory buttons are available.

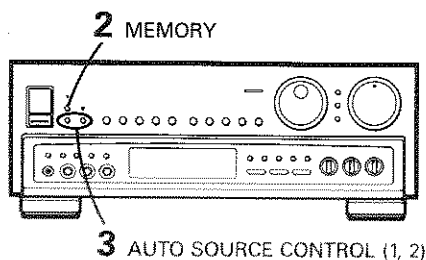
If you connect a component bearing the PIONEER  mark, such as a CD player, to the CONTROL OUT jack on the rear panel, signals can also be transmitted to automatically switch on power and start play of that component.

NOTE:

With some components, even if they bear the  mark, power cannot be switched on and off by remote control.

[Operating Memory]

1. Select the settings on the receiver you want to memorize.
2. Press the MEMORY button.
 - After the "AUTO SOURCE CONTROL" indication has scrolled in the display, "MEMORY" appears and flashes.
3. Press the AUTO SOURCE CONTROL button (1 or 2) you want to use for memorizing.
 - The current settings are memorized (except tone and balance settings).
 - MULTI-ROOM & SOURCE and MUTING ON/OFF settings are not memorized.



Example:

Using the AUTO SOURCE CONTROL 1 button to memorize settings to start play on a CD player connected to the receiver's CONTROL OUT jack.

1. Set the receiver input selector to CD.
2. Adjust surround and other parameters to the settings you want to memorize.
3. Set the volume to the level you want to memorize.
4. Press the MEMORY button.
5. Press the AUTO SOURCE CONTROL 1 button.

"MEMORY 1" flashes in the display for about five seconds.

NOTE:

- If you press another button while "MEMORY 1" is flashing, the memory mode is canceled, so wait until it has stopped flashing before you press another button.
- The volume level setting when "MEMORY 1" stops flashing is memorized.

[Recalling]

Press the AUTO SOURCE CONTROL button (1 or 2) for the settings you want to recall.

Remote control AUTO SOURCE CONTROL buttons (1 or 2) can also be used to recall settings.

"AUTO SOURCE CONTROL 1 (or 2)" is scroll displayed. After the last indication, such as "PLAY CD" has been scroll displayed, the display switches to function indications.

In the case of the example, the following operations are performed.

- ① Press the AUTO SOURCE CONTROL 1 button.
- ② Power to the receiver switches ON, the input selector selects CD, settings for such parameters as surround are called up, and power to the CD player is switched ON.
- ③ Play starts on the CD player.
- ④ Volume level is raised by the MASTER VOLUME on the receiver.

NOTE:

- Memorized volume level and recall volume level may differ by a small amount.
- If volume is near minimum level when memorized, volume may not rise when the setting is recalled.
- Since the power ON and play signals for components bearing the  mark called by Auto Source Control are output through this unit's CONTROL OUT jack, be sure to connect the control cord (refer to page 16).
- With some components, even if they bear the  mark, power cannot be switched on and off by remote control. If this is the case, by connecting the other unit's power cord to this unit's SWITCHED AC OUTLET, and leaving the other unit's power switch ON, power switching will depend on whether this unit is on or off.
- AUTO SOURCE CONTROL memory stores the receiver settings at that point in time; it does not memorize STATION CALL numbers (1—30).
- During the operation of AUTO SOURCE CONTROL, other components are also being controlled, so do not perform other operations until it is finished.
- When using factory settings, pressing an AUTO SOURCE CONTROL (1, 2) button switches both SPEAKERS A and B buttons ON.

With auto source control, power ON/OFF signals and play signals are output from the CONTROL OUT jack at the times shown in the following chart.

Function at the time of memorizing	POWER signal	PLAY signal
VCR 1	Yes (VCR, TV)	Yes (VCR PLAY, TV FUNC "LD")
VCR 2	Yes (VCR, TV)	Yes (VCR PLAY, TV FUNC "LD")
VIDEO	Yes (VCR, TV)	Yes (VCR PLAY, TV FUNC "LD")
TV/SAT	Yes (TV)	Yes (TV FUNC "TV")
LD	Yes (LD, TV)	Yes (LD PLAY, TV FUNC "LD")
TAPE 1	Yes	Yes
TAPE 2	Yes	Yes
PHONO	—	Yes
TUNER	No	No
CD	Yes	Yes

Example of AUTO SOURCE CONTROL 1, 2 memory.

AUTO SOURCE CONTROL	Volume	Input selector	Surround mode
1		CD	DOLBY PRO-LOGIC SURROUND
2		TV/SAT	JAZZ

USING MULTI-ROOM AND SOURCE (MR & S)

Refer to pages 13 and 14 for details concerning connections.

By incorporating the separately sold MR-100 Multi-Room System remote control sensor unit, you can enjoy playing two sources at the same time.

When using a rear channel amplifier in the main room, there is no output from the MULTI-ROOM SPEAKERS terminals.

Remote control operation in Sub room

(With Sub room, only remote control operation is possible.)

- The following remote control button can be used to operate the receiver in Sub room.
 - RECEIVER POWER button.
 - RETURN button.
 - Input selector buttons except TAPE 2 MONITOR.
 - MASTER VOLUME (+, -) buttons: These adjust Sub room volume level.
 - TUNER station call 1-0/10 buttons: The function automatically switches to TUNER.
 - MUTING button: When muting is turned on and then turned off.
 - SLEEP button
- If you connect to the CONTROL jacks of other components, bearing the  mark, such as a CD player or cassette deck, remote control of these components is also possible.
- If light from strong fluorescent lamps falls on the MR-100 remote sensor window, remote control operation may not be possible.

For example

When enjoying playback on VCR 1 on speakers and the TV monitor installed in Main room, you can enjoy a LaserDisc on speakers and MULTI-ROOM TV monitor in Sub room.

[Setting MULTI-ROOM & SOURCE Sub Function]

- Select LD with the input selector buttons.
- Turn the MULTI-ROOM & SOURCE OFF/ON button ON.
 - The MULTI-ROOM indicator lights.
 - When MULTI-ROOM & SOURCE is ON, the Sub function at that time is the same as that set with the input selector.
After switching MULTI-ROOM & SOURCE ON, the SUB FUNCTION cannot be switched on the receiver. Switch it from Sub room with the remote control unit.

NOTE:

When surround or REC SELECTOR are on, MULTI-ROOM & SOURCE does not operate even if you press the MULTI-ROOM & SOURCE button on.

[Setting MULTI-ROOM & SOURCE Main Functions]

- Select VCR 1 with the input selector buttons.
- Start playback of VCR 1 and the LD player.
- For Main room, adjust volume level with the receiver's MASTER VOLUME control.
For Sub room, point the remote control at the MR-100 and adjust the volume level with the MASTER VOLUME buttons.

In Sub room, when you do not know the present volume level or Sub Function of the receiver, press the RETURN button. The Sub Function becomes TUNER, and you will hear the last received FM broadcast station. The volume level will be that initially set on the receiver. You can then select your desired Sub Function, and adjust volume to the desired level.

Precautions concerning MULTI-ROOM & SOURCE

- In Sub room, if you use the remote control to switch RECEIVER POWER off (standby), power to the receiver itself is cut, so be careful when recording or copying tapes in Main room.
- Remember that if you operate the tuner section in Sub room and change the station when you are recording a radio broadcast in Main room, the station you changed to will be recorded.
- Each time you switch MULTI-ROOM & SOURCE ON, volume in Sub room will be set to the previous setting.
- MULTI-ROOM & SOURCE can only be switched ON/OFF with the switch on the receiver itself. Set the Sub Function in Main room, switch MULTI-ROOM & SOURCE ON, and move to Sub room. Volume levels in Main room and Sub room are independent.
- In Main room and Sub room, when a remote control signal is transmitted at the same time, the receiver does not operate.
- As the remote control for the Sub room, use the CU-AV70, CU-AV100, or CU-AV200. In this case, first have that remote control memorize the RETURN button command from the receiver's remote control before use.
- When operating MULTI-ROOM & SOURCE with the MULTI-ROOM AUDIO OUT jacks connected to the Sub room amplifier, if the amplifier bears the PIONEER  mark and has a remote sensor, both the MR-100 and the amplifier may receive remote control commands, making correct operation impossible. Place the MR-100 and amplifier apart from each other, and point the remote control directly at the MR-100 to operate.

HINTS FOR BETTER RECEPTION

EXTERNAL FM ANTENNA

The main advantage of FM over AM is the quality of the broadcast signal. In order to benefit fully from the high signal quality of FM broadcasts, it is recommended that a special-purpose FM antenna be installed. In weak signal areas, a multi-element (3-element, 5-element, 7-element) antenna should be used.

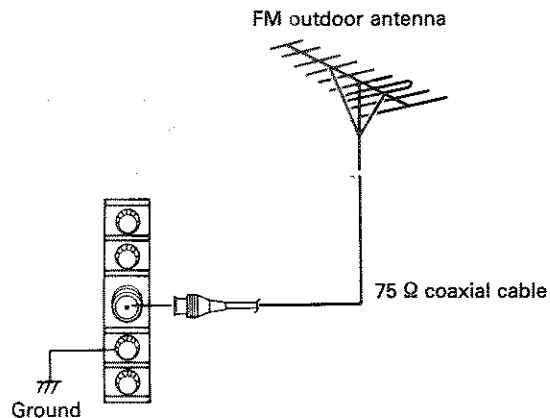
GROUNDING

Grounding is recommended if reception of FM programs is impaired by noise. To ground, connect a thick polyvinyl-insulated wire to the GND terminal and attach the other end to a metal water pipe or grounding bar or wind it around a copper plate and bury it.

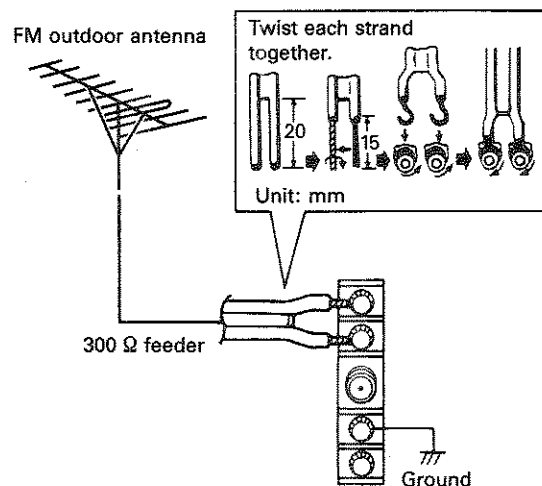
NOTE:

Never connect a wire to a gas pipe for grounding since sparks may ignite the gas.

Connecting the 75 Ω coaxial cable



Connecting the 300 Ω feeder



EXTERNAL AM ANTENNA

If it is not possible to obtain adequate AM reception even by changing the orientation of the AM loop antenna, a separate indoor antenna or an outdoor antenna should be installed.

INDOOR AM ANTENNA

Use a vinyl-insulated wire (5 — 6 m) and connect one end to the AM antenna terminal and affix the other end to the wall or ceiling, as high as possible.

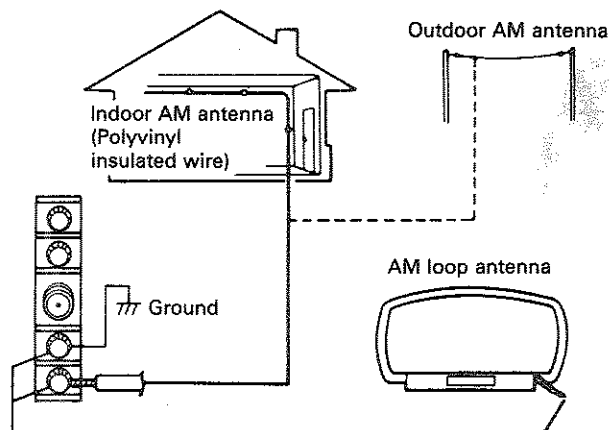
OUTDOOR AM ANTENNA

If reception quality is not improved sufficiently even when an indoor antenna is used, a vinyl-insulated wire should be installed outside and fixed in place.

NOTE:

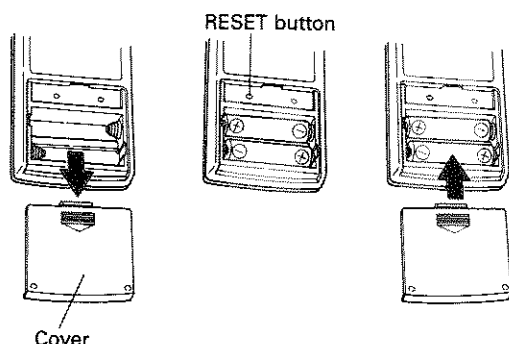
Do not detach the AM loop antenna when using an indoor or an outdoor AM antenna.

AM antenna connection



REMOTE CONTROL OPERATION

PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT

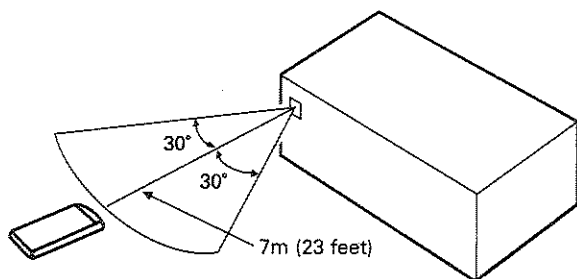


1. Open the battery compartment cover on the rear of the remote control unit. The cover should open easily if you slide it in the direction of the arrow while pressing on it with your thumb.
2. Take out the two supplied batteries size "AA" (IEC LR6/AM-3), and insert them into the battery compartment in accordance with the indications in the compartment.
3. Press the RESET button.
4. Close the cover of the battery compartment.

Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

- A.** Always insert batteries into the battery compartment correctly matching the positive (+) and negative (-) polarities, as indicated inside the compartment.
- B.** Never mix new and used batteries.
- C.** Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

REMOTE CONTROL RANGE



When operating the remote control unit, point the front of the unit at the front panel of the receiver. The remote control unit may be used within a range of about 7 meters (23 feet) from the remote sensor, within angles of up to about 30 degrees.

Performance of the remote control unit is adversely affected in the presence of a strong fluorescent light. Keep such lights away, especially from the sensor window.

Battery Replacement

When the batteries have run out, the CONTROL MODE buttons will not light properly. Be sure to replace the batteries as soon as possible. Remove the old batteries only if they can be replaced by new ones immediately.

Load batteries by following the instructions in the "PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT" section.

Also be sure to always use the specified batteries (size "AA" (IEC LR6/AM-3) alkaline batteries).

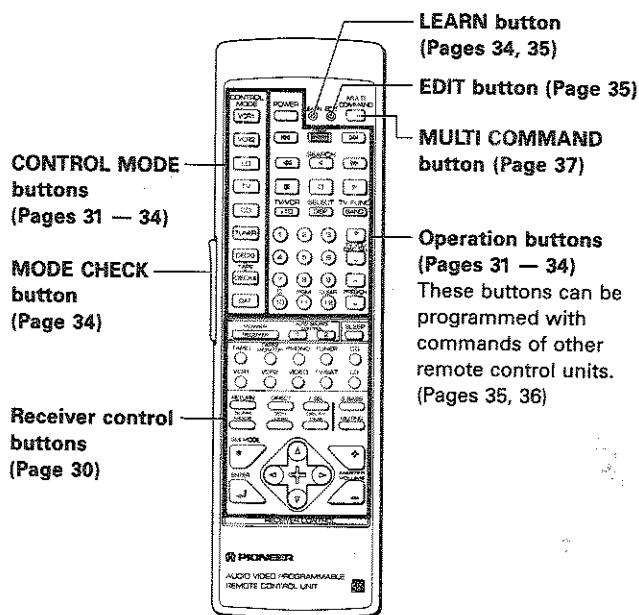
NOTE:

When no batteries are inserted, the programmed memory contents will be erased after about 30 minutes.

When you want to clear the Programmed memory, refer to page 37. The memory cannot be cleared simply by removing the batteries.

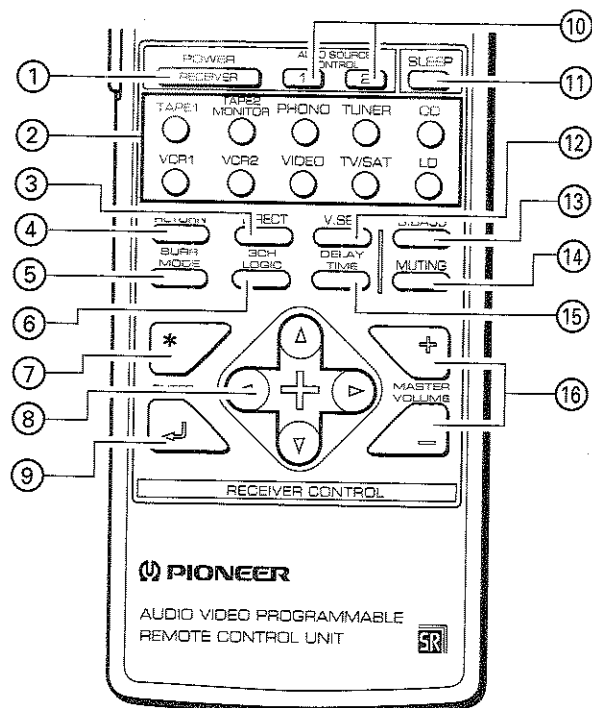
OUTLINE OF BUTTON LAYOUT

- The buttons on the lower half of the remote control command receiver functions.
- Buttons on the upper half are used to operate other components.
- The remote control unit can "learn" the commands of other remote control units.
- There are 12 kinds of preset signals for operation of VCR 1, VCR 2, and TV. Select and use one of them.
- A maximum of seven commands can be programmed into the MULTI COMMAND button, enabling transmission of a sequence of commands at the push of a button.



REMOTE CONTROL OPERATION

RECEIVER CONTROL BUTTONS



① RECEIVER POWER button

Switches the receiver power between ON and STANDBY.

② Input selector buttons

Press when switching the receiver's input selector. The CONTROL MODE also switches to the same component (except VIDEO and PHONO). (One CONTROL MODE button lights.) Pressing TAPE 1, TAPE 2 MONITOR, causes the CONTROL MODE DECK II button to light.

③ DIRECT button

Press this to listen to source sound without passing the audio signal through sound quality and balance adjusting circuitry. The surround mode, and rear and center speakers are automatically switched off.

④ RETURN button

Press the RETURN button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME buttons.

• TAPE 2 MONITOR OFF • MUTING OFF
• SURROUND MODE OFF • FUNCTION TUNER

And SPEAKERS buttons switch as follows.

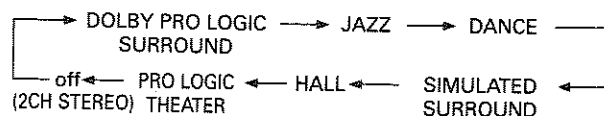
Before pressing the RETURN button	After pressing
Both A and B are off	→ Only A is on
Only A is on	→ No change
Only B is on	→ Both A and B are on
Both A and B are on	→ No change

NOTE:

Press the RETURN button, and the frequency last selected is received. If reception of a station is not possible with that frequency, the mode automatically switches to AUTO TUNING.

⑤ SURR (SURROUND) MODE button

The surround mode changes in sequence each time you press this button.



⑥ 3CH LOGIC button

Switches DOLBY 3CH LOGIC on and off.

⑦ GUI MODE button (GUI operation)

Switches GUI MODE on and off.

⑧ Select/Adjust buttons (←, →, ▲, ▼) (GUI operation)

When using the GUI function with on-screen display, use for such operations as selection and adjustments (by moving the cursor).

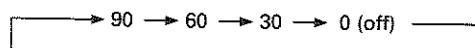
⑨ ENTER button (GUI operation)

Press to execute an operation selected with the Select/Adjust buttons ⑧.

⑩ AUTO SOURCE CONTROL buttons

⑪ SLEEP timer button

Activates the SLEEP timer. The length changes in the following manner each time the button is pressed:

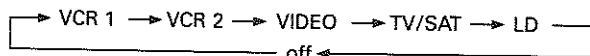


Unit: minutes

When SLEEP is ON, the display section is about half as bright as when SLEEP is OFF.

⑫ V.SEL (VIDEO SIGNAL SELECTOR) button

This switches only the video signal in sequence, leaving the sound unchanged.



⑬ S.BASS button

Switch ON when you want to boost bass. The SUPER BASS indicator lights.

⑭ MUTING button

Used to temporarily mute the sound. When it's in the on position, the "MUTING" indicator lights. The volume is restored when pressed again.

⑮ DELAY TIME button

During DOLBY PRO-LOGIC SURROUND and SIMULATED SURROUND operation, delay time settings can be changed from 16 ms to 30 ms in 2 ms steps.

The DELAY TIME button does not operate in any other surround mode.

⑯ MASTER VOLUME (+, -) buttons

Adjusts the overall volume.

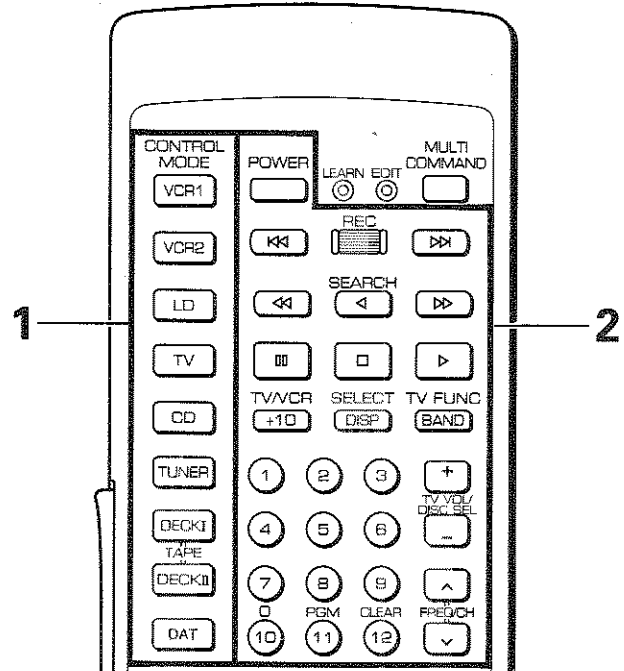
OPERATING OTHER COMPONENTS

REMOTE CONTROLLING OF ANY OTHER OF YOUR AUDIO-VISUAL COMPONENTS VIA THIS UNIT REQUIRES:

1. All components must be remote controllable (have a sensor window on the front panel) to receive direct command from this unit, upon successful learning of those commands by this programmable unit or,
2. All units must have remote control jacks (CONTROL IN/OUT) on the rear panel and be correctly connected to the receiver according to the diagram on page 16.

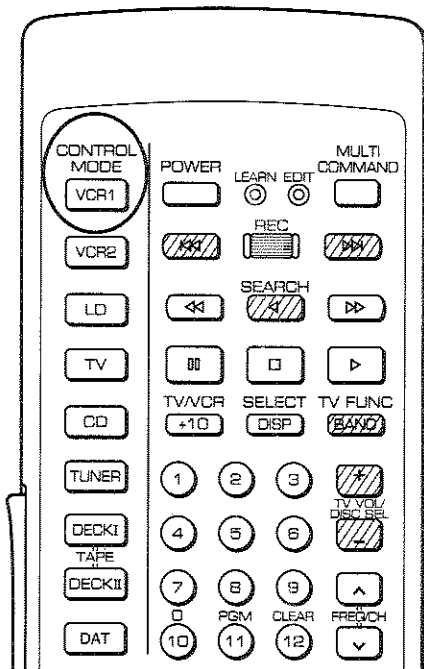
When operating components other than the receiver:

1. Press the **CONTROL MODE** buttons for the component you want to operate.
2. Press the operation button.



VCR 1 operation

buttons do not operate in the selected CONTROL MODE.



(With VCR 2, even if you press an operation button, no signal is output. Preset or program and use.)

POWER button:

Switches VCR power ON/OFF.

REC button:

Selects the recording mode.

◀ (REW) button:

Rewinds the tape and allows picture search.

▶▶ (FF) button:

Rapidly advances the tape and allows picture search.

■ (PAUSE/STILL) button:

Sets pause and still picture.

■ (STOP) button:

Stops tape transport.

▶ (PLAY) button:

Selects playback.

TV/VCR button:

This button can be used only for VCRs with a TV/VCR selector. Toggles the antenna output between TV and VCR.

DISP (DISPLAY) button:

Switches TV screen display ON/OFF.

1—12 buttons:

Use to call up channels.

CH ▲ button:

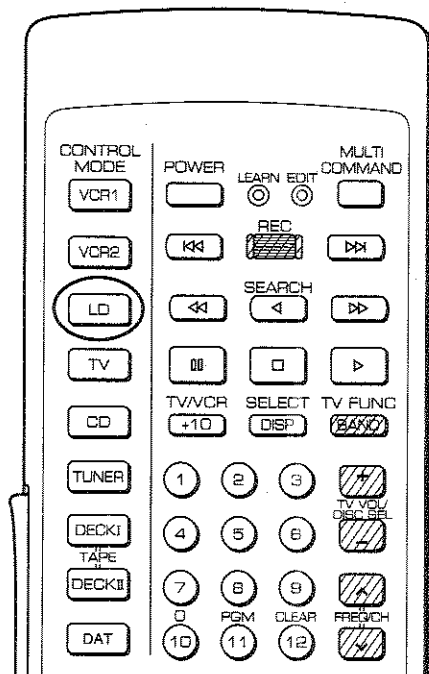
Shifts channels in ascending order.

CH ▼ button:

Shifts channels in descending order.

REMOTE CONTROL OPERATION

LD player operation



POWER button:

Switches LD player power ON/OFF.

⏮ (CHAPTER SKIP) button:

Searches for the start of the chapter playing.

⏭ (CHAPTER SKIP) button:

Searches for the start of the next chapter.

SEARCH button:

Used for the search operation and for the memory repeat operation.

⏮ (SCAN) button:

Selects fast backward.

⏭ (SCAN) button:

Selects fast forward.

⏸ (PAUSE) button:

Video and audio are stopped and playback is paused.

■ (STOP/EJECT) button:

Playback is stopped when pressed once. Pressing again causes the disc tray to come out.

▶ (PLAY) button:

Selects playback.

+10 button:

Use to input such information as chapter numbers higher than 10.

DISP (DISPLAY) button:

Switches TV screen display of chapter, frame/time number ON/OFF.

1—10 buttons:

Used for chapter and frame/time number search and for chapter program play.

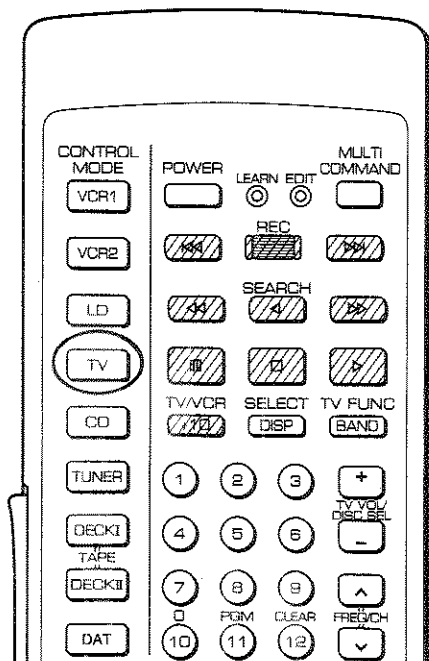
PGM (PROGRAM) button:

Allows use of chapter program play.

CLEAR button:

Used for releasing repeat playback, number correction and mode release during search operation, and for releasing chapter program play.

TV operation



POWER button:

Switches the power of the TV ON/OFF.

DISP (DISPLAY) button:

TV image display ON/OFF.

TV FUNC (TV FUNCTION) button:

Used to change the TV FUNCTION.

• TV FUNC button cannot be used with some PIONEER TVs.

1—12 buttons:

Used to call up channels.

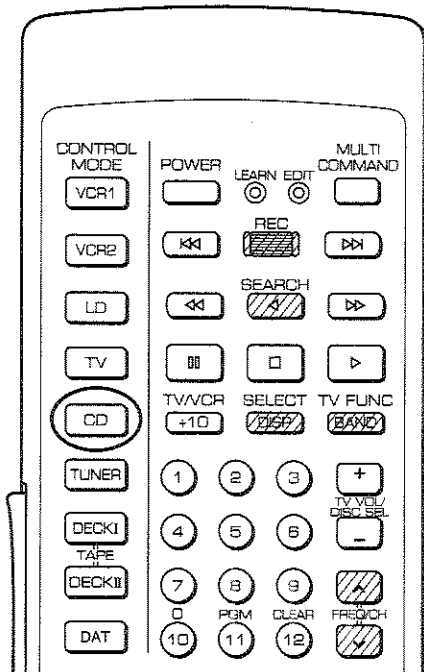
TV VOL (+, -) buttons:

Raises and lowers the volume.

CH $\wedge$, $\vee$ buttons:

Changes the channel in the direction of larger ($\wedge$) and smaller ($\vee$) channel numbers.

CD player operation



POWER button:

Switches CD player power ON/OFF.

⏮ (TRACK SEARCH) button:

Returns to the beginning of the track currently in playing.

⏭ (TRACK SEARCH) button:

Advances to the next track.

⏮ (MANUAL SEARCH) button:

Selects fast backward.

⏭ (MANUAL SEARCH) button:

Selects fast forward.

⏸ (PAUSE) button:

Pauses playback.

■ (STOP) button:

Stops playback.

▶ (PLAY) button:

Selects playback.

+10 button:

Use when selecting a track number higher than 10. For example, to select 21, press the [+10] button twice and then the [1] button. This button cannot be used with some CD players.

1—10 buttons:

For direct selection of a track or programming of tracks.

PGM (PROGRAM) button:

Press to program the CD player.

CLEAR button:

Erases a memorized program.

DISC SEL (SELECT) +, - buttons:

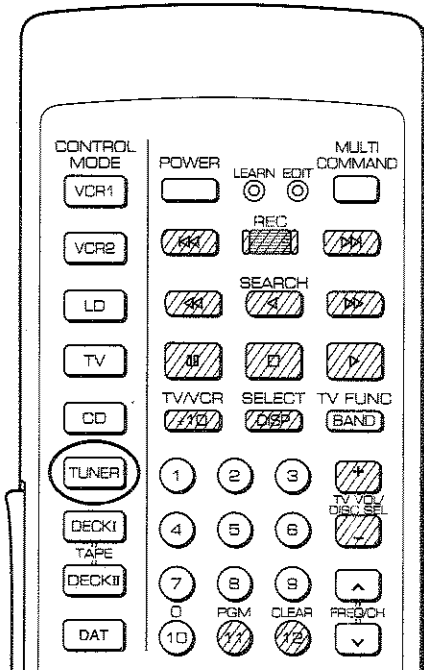
Use to select a disc of the file-type CD player.

+ button only ... Use to select a disc No. (1 to 6) of multi-play CD players. It may also be used to select twin CD DISC I/II.

NOTE:

Some multi-play CD players cannot be controlled using these buttons.

Tuner operation



(The receiver tuner section can also be operated when TUNER is selected.)

POWER button:

Switches tuner power ON/OFF.

1—10 buttons:

For recall of tuner presets.

Buttons 1 to 10 are used for the receiver (Buttons 11 and 12 cannot be used).

Pressing a button more than once increases the number by ten. For example, press the 5 button once for 5ch, twice for 15ch, and three times for 25ch.

BAND button:

Switches the FM and AM bands in turn.

FREQ Δ, ∇ buttons:

Shifts the frequency up (Δ) and down (∇).

Auto tuning:

Press FREQ Δ (up) or ∇ (down) button until the frequency starts to change, then release it. The tuner will automatically search for a broadcasting station and stops when one is found, and the TUNED indicator lights up. To search for another station, press again.

Manual tuning:

Press FREQ Δ (up) or ∇ (down) button and release quickly. The tuning frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station. The TUNED indicator lights up when the station is tuned in best.

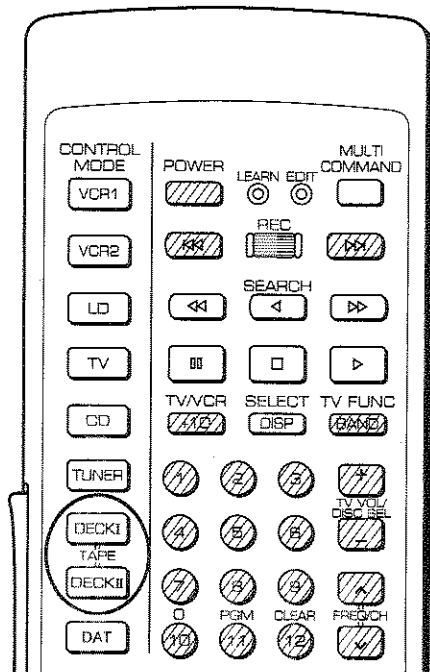
• If you keep the FREQ (Δ/∇) button depressed after the frequency has begun to change, the reception frequency changes continuously, and stops when the button is released.

NOTE:

When AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times MANUAL TUNING is recommended.

REMOTE CONTROL OPERATION

DECK I, II operation



When using a single cassette deck, select DECK II.

REC (REC) button:

Selects the recording or recording standby mode.

◀, ▶ (FF) buttons:

Rapidly advances the tape in the direction of the arrow.

◀ (PLAY) button:

Selects reverse playback.

■ (PAUSE) button:

Temporarily stops tape transport. Press again to resume tape transport.

■ (STOP) button:

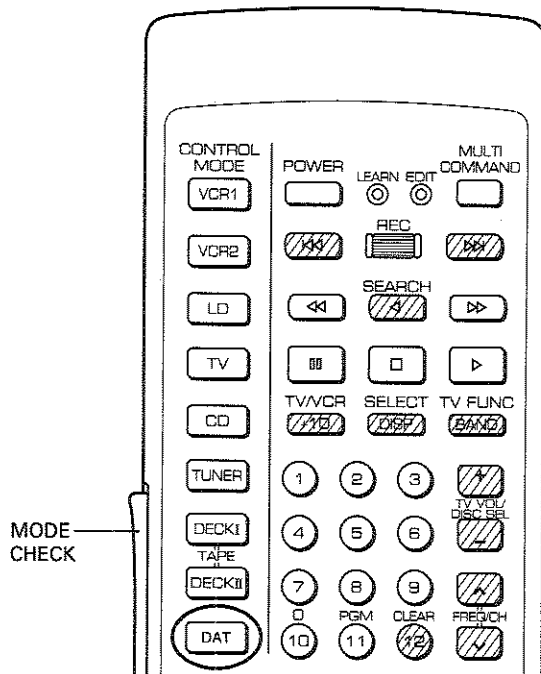
Stops the tape transport.

▶ (PLAY) button:

Selects forward playback.

SELECT button:

Selects the cassette No. (1 to 6) for multi-cassette changer.



MODE
CHECK

DAT (Digital Audio Tape deck) operation

POWER button : Switches DAT deck power ON/OFF.

REC (REC) : Selects the recording mode.

◀◀ (REW) : Rewind.

▶▶ (FF) : Fast forward.

■ (PAUSE) : Temporarily stops tape transport.
Press again to resume tape transport.

■ (STOP) : Stops the tape transports.

▶ (PLAY) : Playback.

1—10 : 1 to 10: Use to input numbers.

PGM : Use to playback a program.

MODE CHECK button

When you press the MODE CHECK button, the button for the present CONTROL MODE (for example, LD) lights. If you continue pressing the button, the CONTROL MODE changes in sequence.

PROGRAMMING

The remote control unit has a LEARN mode and an EDIT mode. In the EDIT MODE, there is a PRESET mode and a MULTI-EDIT mode.

• **LEARN MODE**: In each of the CONTROL MODE, a single remote control signal can be input into each of the operation buttons.

• EDIT MODE

PRESET MODE: In the VCR 1, VCR 2, or TV CONTROL MODE, you can select and use one of the 12 kinds of preset remote control signals.

MULTI-EDIT MODE: Input up to seven commands into the MULTI COMMAND button, and transmit the sequence of commands at the push of a single button.

LEARN

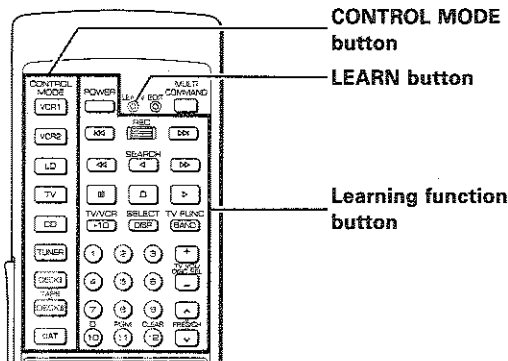
This system's remote control can "learn" the commands of other remote control units, regardless of manufacturer, as long as the other unit is of the infrared type.

On rare occasions, programming this unit may be impossible with some special types of infrared remote control units.

In some cases you may still need the original remote control unit for special situations. But as a rule, you will be able to use this PIONEER remote control for most system control needs, including video as well as audio equipment.

Learning capacity and buttons that can learn

The buttons shown in the diagram can learn. By changing the CONTROL MODE, a single button can be used to learn a maximum of nine commands, enabling a total of 261 commands to be learned. However, the capacity for learning differs depending on the remote control signal. With PIONEER remote control signals, about 70 commands can be learned.



[Learning procedure]

1. Press the LEARN button to switch to the LEARN mode.
2. Press one of the CONTROL MODE buttons.
3. Press one of the Learning function buttons.
4. Receive a remote control signal from another remote control and learn.

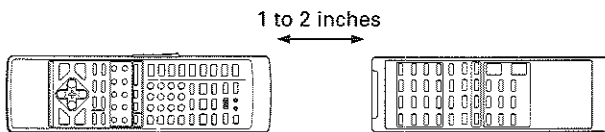
[Operation example]

As a learning example, an explanation follows on how to use the CONTROL MODE VCR 1 button to learn the VCR PLAY signal.

Place the transmission sections of the programmable remote control unit and the remote control of the VCR facing each other.

NOTE:

Be sure to place the remote controls on a stable surface such as a table while doing this. Also, avoid placing near fluorescent lighting fixtures or in direct sunlight. When programming operations, use new batteries.

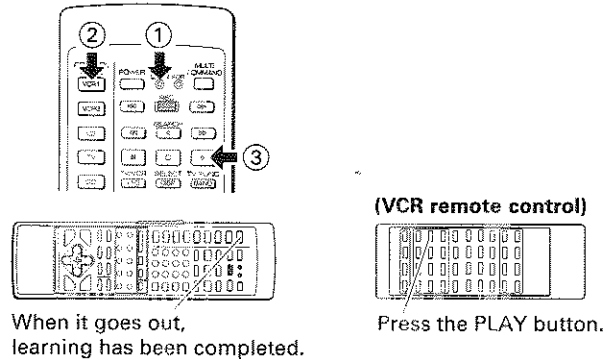


Place the two units on a table, separated by 2 to 5 cm (1 to 2 inches).

Memorization will not be possible if they are too close.

1. Press the LEARN button.
 - All the CONTROL MODE buttons flash at random.
2. Press the VCR 1 CONTROL MODE button.
 - Only the VCR 1 button flashes.
3. Press the button.
 - The VCR 1 button goes out, and lights after about one second. If you perform procedure 4 before the VCR 1 button lights, correct learning is not possible, so be sure to confirm that the button is lit.
4. Press and hold the PLAY button on the VCR remote control.
 - When learning is completed, the VCR 1 button goes out, and all the CONTROL MODE buttons flash at random. The VCR 1 button has learned the new signal. During the learning operation, if you press the VCR button twice, or move the remote control, correct learning is not possible.

To continue learning with other buttons, continue from procedure 2.



To end the learning operation, press the LEARN button.

[When learning is not possible]

After the selected CONTROL MODE button (for example, VCR 1) flashes twice, and all the CONTROL MODE buttons flash, repeat the learning operation from procedure 2.

[When learning is not possible because memory is full]

After the selected CONTROL MODE button (for example, VCR 1) flashes four times, the LEARN MODE is canceled.

If the memory becomes full even when you have used only a small number of buttons for learning, take the following steps.

• Try learning once more using the button that resulted in full memory.

Memory may appear to be full even when it is not due to the two remote controls being too far apart, not enough power remaining in the batteries, or the effect of light from fluorescent lighting fixtures or direct sunlight.

• Check buttons already used for learning.

If the CONTROL MODE button remains lit after you have quickly pressed and released a button used for learning, memorization in that button is incorrect, resulting in the memory full condition. If you perform learning once more, abnormal data is cleared, returning you to normal conditions.

NOTE:

- After pressing the LEARN button, if you do not press a button within about 30 seconds, the LEARN MODE is canceled.
- After pressing one CONTROL MODE button, if you do not press a button that can learn within about 30 seconds, the LEARN MODE is canceled. If a button other than a one that can learn is pressed, the condition for CONTROL MODE button input is resumed.
- After pressing an operation button that can learn, if a remote control signal is not received within 45 seconds, the LEARN MODE is canceled.

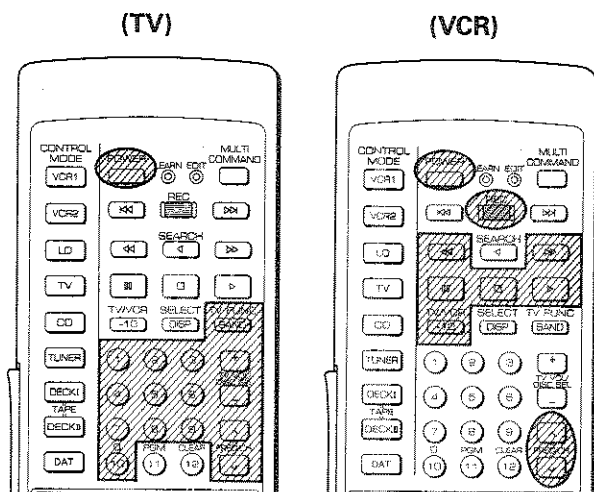
EDIT

In the EDIT MODE, there is the PRESET MODE and MULTI-EDIT MODE.

PRESET MODE (TV, VCR 1, VCR 2)

12 kinds of remote control signal formats are already preset for basic TV and VCR functions. If they conform to your TV or VCR functions, you can automatically preset operation buttons with the desired format's remote control signals and use to commands operations. Preset operation buttons are indicated in the diagram by . When you also want to use other buttons, use the LEARN operation to memorize commands.

REMOTE CONTROL OPERATION



Button functions are the same as PIONEER's unified remote control code functions, so refer to page 32 concerning TV functions, and page 31 concerning VCR functions.

NOTE:

- If there is a remote control operation button for a function your TV or VCR does not have, operation is not possible.
- Depending on the kind of remote control signal, it may not be possible to preset TV FUNC button for TV operation.
- The PIONEER remote control code remains in the TV DISP, 11, and 12 buttons, and the VCR DISP, 1 to 12 buttons without presetting.

[Procedure for presetting]

1. Press the **EDIT** button to switch to the **EDIT** mode.
2. Press one of the **CONTROL MODE** buttons (VCR 1, VCR 2, or TV).
3. Press one of the buttons 1 to 12.
 - One kind of code is preset.
 - To continue presetting, repeat operation procedure 2, 3.
4. Press the **EDIT** button.
 - The **EDIT** mode is canceled.
5. Confirm that the component (TV or VCR) can be operated by the preset code.

If operation is not possible, repeat the procedure from step 2, and press a different number button (1—12) at step 3 to search for a preset code that enables operation. Refer to the diagram on this page.

[Operation example]

As a preset example, here is an explanation of how to preset in VCR 1.

1. Press the **EDIT** button.
 - The VCR 1, VCR 2, and TV **CONTROL MODE** buttons flash in sequence.
2. Press the **VCR 1 CONTROL MODE** button.
 - Only the VCR 1 button flashes.
3. Press one of the buttons 1 to 12.
 - For example, if you press button 1, the remote control signal format selected with VCR 1 operation button 1 is preset. The **CONTROL MODE** buttons light in sequence (indicating that registration has been completed), and then the VCR 1, VCR 2, and TV buttons flash in sequence. (Returning to the condition in procedure 1.)
 - To continue presetting for VCR 2 and TV, repeat operation procedures 2 and 3.
4. Press the **EDIT** button.
 - The **EDIT** mode is canceled.

5. Point the remote control at the sensor window of the VCR you want to operate and press an operation button to confirm that operation is possible.

- If operation is possible, presetting has been completed.
- If operation is not possible, repeat operations from step 2, selecting a different number button (1 to 12) at step 3.

If there is a button among buttons 1 to 12 that cannot operate, press the **EDIT** button once more to cancel the **EDIT** mode, and memorize in the **LEARN** mode.

NOTE:

- After pressing the **EDIT** button, if you do not press a button within about one minute, the **EDIT** mode is canceled.
- After presetting, you can use the **LEARN** mode to memorize a command in a preset button, but the preset signal is erased.
- After memorizing in the **LEARN** mode, if you preset operations under specified buttons, signals memorized in the **LEARN** mode are cleared.

Programmable remote control codes of other manufacturers in the preset mode

The following table shows the **PRESET MODE** buttons (1 to 12) used to call up the remote control codes of other manufacturers. Preset remote control signals in the table, however, may not always enable operation. Numbers in parenthesis indicate a reduced possibility of operation.

Manufacturer	TV	VCR
RCA	1, (10)	(1), (6)
ZENITH	3	(3), (4)
GE	8, (11), (1)	(1), (8)
SONY	4	4
TOSHIBA	5	5, (9)
HITACHI	6, (10)	6
PHILIPS	7	—
JVC	—	7
PANASONIC	8	8
MITSUBISHI	9, (10)	9
SANYO	—	10, (12)
SHARP	(2)	2
GOLD STAR	(10)	(11)
MAGNAVOX	(7), (10), (12)	(8), (9)
SYLVANIA	(7), (10), (12)	(8), (9)
QUASER	8	8
FISHER	—	12, (10)
WARD'S	(2), (7), (10), (11)	(2)

MULTI-EDIT MODE

A maximum of seven commands can be programmed into MULTI COMMAND button. This enables a series of signals to be transmitted simply by pushing the MULTI COMMAND button.

(Example) Programming the following three commands into the MULTI COMMAND button.

- ① RECEIVER POWER
- ② RECEIVER FUNCTION CD
- ③ CD PLAY (▶)

1. **Press the EDIT button. (Switches to the EDIT mode)**
 - The VCR 1, VCR 2, and TV CONTROL MODE buttons flash in sequence.
2. **Press the MULTI COMMAND button. (Switches to the MULTI-EDIT mode)**
 - The CONTROL MODE buttons flash at random.
3. **Press the RECEIVER POWER button.**
 - The CONTROL MODE buttons go out, and then flash at random. (Registration is completed)
4. **Press the CD receiver input selector button.**
 - The CONTROL MODE buttons go out, and then flash at random. (Registration is completed)
5. **Press the CD CONTROL MODE button.**
 - The CD button flashes.
6. **Press the PLAY (▶) button.**
 - The CD button goes out, and then the CONTROL MODE buttons flash at random. (Registration is completed)
7. **Press the MULTI COMMAND button.**
 - The CONTROL MODE buttons light in sequence. (This means that registration has been completed), and then the VCR 1, VCR 2, and TV buttons flash in sequence.
8. **Press the EDIT button.**
 - The EDIT mode is canceled.

If you press the MULTI COMMAND button, these remote control signals are transmitted in the order programmed, so if CONTROL IN/OUT is connected (refer to page 16), and if remote control signals can reach both the receiver and CD player sensor windows, power to the receiver switches on, the input selector switches to CD, and the CD player starts playing. (When the CD player's power cord is plugged into the receiver's switched AC OUTLET.)

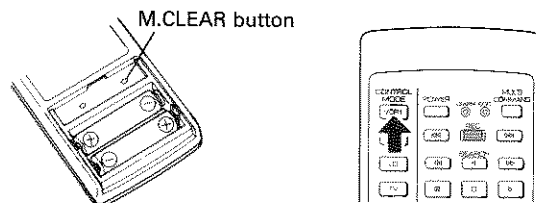
NOTE:

- After pressing the seventh command, the MULTI-EDIT mode is registered automatically (The VCR 1, VCR 2, and TV CONTROL MODE buttons flash in sequence), but the EDIT mode is not canceled. To cancel the EDIT mode, press the EDIT button.
- After memorizing six or less commands, if you cancel the EDIT mode without pressing the MULTI COMMAND button again, all the registered commands are cleared, leaving the previous commands as they were.
- If a button is for transmission, even if it is not an operation button in the selected CONTROL MODE, registration is still possible. (Buttons such as the VCR 1 ◀◀.)
In this case, during signal transmission, the CONTROL MODE button momentarily lights, but the remote control code is not transmitted.
- If the component to be operated is installed at a distance, if there is an obstacle between a specific component sensor window and the remote control, or if component operation speeds are very different, MULTI-COMMAND operation may be incorrect. When repeating operations, first return to the initial settings for each component. For operations such as power ON/OFF, if components are switched ON, they can be switched OFF by transmitting a signal.

RETURNING TO THE INITIAL SETTINGS

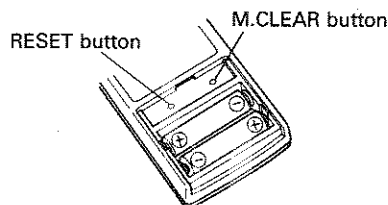
Initialization of particular CONTROL MODES

1. Remove the battery compartment cover.
2. While pressing the M.CLEAR button inside the cover, press the button for the CONTROL MODE (for example, VCR 1) that you want to initialize.
 - For example, if you initialize VCR 1 using the method mentioned above, the CONTROL MODE button lights for about one second, and the VCR 1 operation buttons are initialized.



Initializing the entire memory

1. Remove the battery compartment cover.
2. While pressing the M.CLEAR button inside the cover, press the RESET button.
 - Do not release the M.CLEAR button before releasing the RESET button. While pressing the M.CLEAR button, press the RESET button, and quickly release.
 - Initialization is not possible if the buttons are pressed in the reverse order.
 - All the CONTROL MODE operation buttons are initialized, and data in the MULTI COMMAND button is cleared.



OPERATING USING GUI

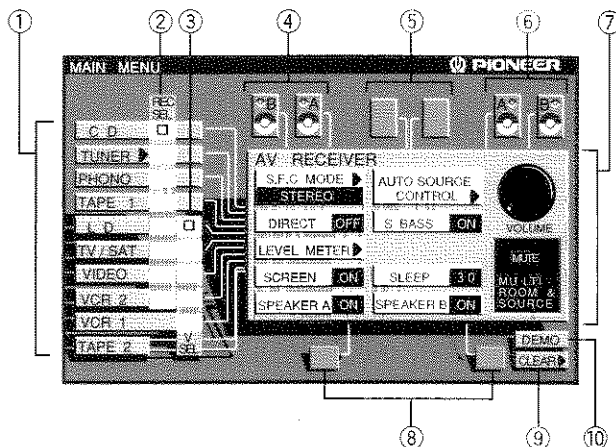
GUI

GUI (Graphic User Interface) lets you use the TV screen to operate the system.

- Press the GUI button and the MAIN MENU is displayed on the TV screen as shown below.
- When operating, use the Δ , ∇ , $\triangleleft$, and $\triangleright$ buttons on the remote control or the main unit's MULTI-JOG to move the cursor (the hand shaped mark) to select operation panel buttons displayed on the TV screen. When the cursor is on the button you want, press the ENTER button on the remote control or main unit.
- When the operating instructions say "Press the button", this means move the cursor to the desired button and press the ENTER button.

NOTE:

- If you do not perform any of the operations above within 20 ~ 40 seconds, the GUI display is canceled.
- When you operate this unit, GUI indications automatically appear on screen for the selected operation.
- When operating another component (particularly a File-type CD player) with the GUI display, the control signal may not be accurately received, resulting in incorrect operation. Although very unlikely, if this does occur, repeat the operation.



① Input selector

Select the component you want to operate.

- | | |
|-----------------|-------------------|
| CD (p. 41 — 45) | TUNER (p. 39, 40) |
| PHONO (p. 46) | TAPE 1 (p. 46) |
| LD (p. 46) | TV/SAT (p. 46) |
| VIDEO (p. 46) | VCR 2 (p. 46) |
| VCR 1 (p. 46) | TAPE 2 (p. 46) |

The GUI operation can be used to operate some functions of PIONEER marked VCRs, LD players, TV, cassette decks, turntables, and CD players.

REMOTE CONTROLLING OF ANY OTHER OF YOUR AUDIO-VISUAL COMPONENTS VIA THIS UNIT REQUIRES:

- All components must have remote control jacks (IN/OUT) on the rear panel and be correctly connected to the receiver according to the diagram on page 16.

② REC SEL (Recording selector)

The function selected with the REC SEL button on the main unit (p. 24) is indicated by the $\square$ mark. When the recording selector is OFF, no mark is indicated anywhere.

③ V.SEL (Video signal selector)

The function selected with the V.SEL button on the remote control (p. 25) is indicated by the $\square$ mark. When the video signal selector is OFF, no mark is indicated anywhere.

④ Front speakers A, B (L)

⑤ Center speakers

⑥ Front speakers A, B (R)

⑦ Receiver operation buttons

S.F.C. MODE (p. 47):

Indicates the current S.F.C. MODE settings. When changing settings, move the cursor to this button, and press the ENTER button to switch to the S.F.C. MODE display. Choose the desired mode from the 8 available.

DIRECT (p. 49):

Switches DIRECT ON/OFF.

LEVEL METER (p. 48):

Press this button for LEVEL METER display with left and right level meter indications.

SCREEN (p. 49):

Switches SCREEN SAVER ON/OFF.

SPEAKER A:

Switches SPEAKER A system ON/OFF.

AUTO SOURCE CONTROL (p. 48):

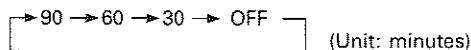
Press this button for AUTO SOURCE CONTROL display.

S.BASS (SUPER BASS):

Switch ON when you want boosted bass.

SLEEP:

This operates the sleep timer. Move the cursor to this button, and each time you press the ENTER button, timer settings change as follows.



SPEAKER B:

Switches SPEAKER B system ON/OFF.

VOLUME:

Indicates current volume level.

MUTE:

Indicates when the MUTE function (p. 30) is ON. Switch the MUTE function ON/OFF with the MUTING button on the main unit.

MULTI-ROOM & SOURCE ON:

Indicates when MULTI-ROOM & SOURCE (p. 27) is ON. Switch MULTI-ROOM & SOURCE ON/OFF with the MULTI-ROOM & SOURCE button on the main unit's front panel.

⑧ Rear speakers

⑨ CLEAR (p. 49):

Press this button for the DATA CLEAR display. Select this when you want to erase all CD and TUNER operation data from memory.

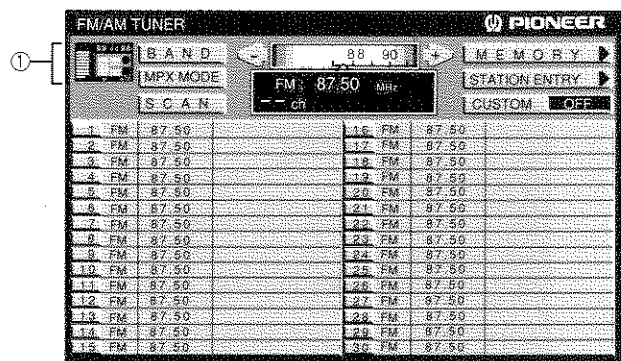
⑩ DEMO (p. 1):

Press this button to switch the DEMO MODE ON.

OPERATING TUNER (GUI OPERATION)

Calling up the tuner display.

1. Press the **GUI MODE** button.
The MAIN MENU is displayed.
2. Press the **TUNER** button of the input selector.
The ▷ mark moves to the right of the TUNER display.
3. Press the **TUNER** button once more.
FM/AM TUNER operation indications are displayed as shown below.



NOTE:

To return to the MAIN MENU from the tuner operation menu, press the MAIN MENU icon (①) in the upper left of the display.

MANUAL/AUTO TUNING

1. Move the cursor to **BAND**, and select **FM** or **AM**.
The band changes each time you press the ENTER button.
2. Move the cursor to the left or right (– or +) of the analog meter and press the ENTER button to raise or lower the frequency as desired.

• One Step Tuning:

Press the ENTER button and release quickly. The frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station.

• Auto Tuning:

Press the ENTER button until the frequency starts to change (about 1 sec.), then release it. The tuner automatically searches for a broadcasting station and stops when one is found.

NOTE:

When the signal level is too weak for reception, the unit cannot perform Auto tuning. In this case, change to Manual tuning.

• High Speed Manual Tuning:

Keep the ENTER button pressed. The frequency changes continuously, and stops when the button is released.

FM auto stereo reception and monaural reception

Press the MPX MODE button, and mono is indicated in the top right of the digital display section. Press once more and it disappears. (The MONO indicator in the main display comes on and goes out in the same way.)

• If an FM stereo broadcast is received when the MONO indicator is out, the sound will be monaural.

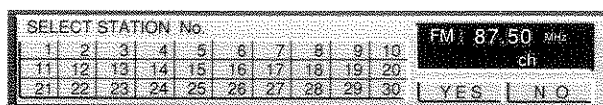
If there is interference during STEREO mode reception, switch to MONO. The sound will become monaural but interference will be reduced.

PRESET TUNING

You can preset up to 30 FM/AM stations for easy recall.

[Station Presetting]

1. Tune in the desired station.
Refer to "MANUAL/AUTO TUNING" procedure.
In addition to station frequencies, the MPX MODE can also be preset (FM only).
2. Press the **MEMORY** button in the upper right of the display.
Number buttons 1 to 30 are displayed.
The frequency to be memorized is indicated in the upper right digital display section.



3. Select the desired channel for memorizing using the **STATION No. 1 to 30** buttons.
4. Press **YES** to complete memorization and returns to the FM/AM TUNER operation display.
To cancel presetting, press NO.
To receive a preset station, press the channel number button for the desired station.

OPERATING TUNER (GUI OPERATION)

STATION ENTRY

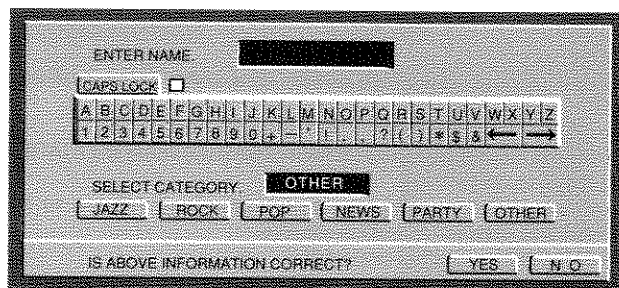
You can register preset stations under STATION NAME and CATEGORY.

1. Move the cursor to the channel number (ST. No.) of the station you want to receive, and press the ENTER button.
2. Press the STATION ENTRY button in the TUNER operation display.

The STATION ENTRY display appears.

NOTE:

- If you select a frequency that is not preset, you cannot press the STATION ENTRY button.
- To cancel the STATION ENTRY display, press the NO button at the lower right.



3. Select the desired letters on the displayed keyboard to register a STATION NAME.

- Up to 10 letters can be registered.
- When inputting lower case letters, press CAPS LOCK to off position (on the right side without the □ mark).
- Press the ← → buttons to make a space on the left or right.

NOTE:

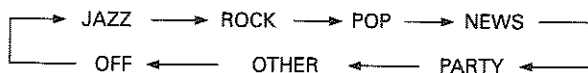
If you press another operation button while inputting, the STATION ENTRY mode is canceled, and data input so far is cleared.

4. Select the desired category from the 6 displayed (JAZZ, ROCK, POP, NEWS, PARTY, OTHER).
 5. If the desired settings are displayed, press YES.
- Pressing NO cancels STATION ENTRY.

CUSTOM SEARCH

Press CUSTOM on the FM/AM TUNER operation display, select the desired category from the 6 displayed, and the appropriate station number button (1 to 30) is brightly lit.

Each time you press the CUSTOM button, the category changes as follows.



SCAN

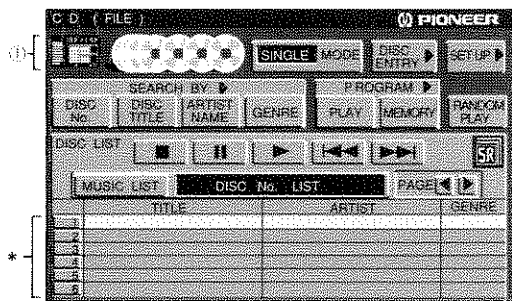
Press SCAN, and broadcast stations memorized in STATION are received in sequence for about 5 seconds each. When reception is not possible, SCAN moves quickly to the next station.

OPERATING CD PLAYER (GUI OPERATION)

Calling up the CD operation display.

1. Press the GUI MODE button.
The MAIN MENU is displayed.
2. Press the CD button of the input selector.
The ▷ mark moves to the right of the CD display.
3. Press the CD button once more.
CD (FILE) operation indications are displayed.
You can select from 5 kinds of operation display to suit the type of CD player. This is a File-type CD player when the unit leaves the factory. Perform CD SET UP procedures to match the kind of CD player you are using.

Fig. A



NOTE:

To return from the CD operation display to the MAIN MENU display, press the icon (1) in the upper left of the display.

CD SET UP

This unit lets you select the operation display to suit your CD player.

1. Press SET UP in the display.
The CD SET UP MENU is displayed.
2. Select the type of CD player from the 5 available that corresponds to your CD player, and press YES.



- FILE** : File-type CD player
- SINGLE** : Single-type CD player
- 3 MAGAZINE** : Multi-play CD player (3 magazine type)
- 2 MAGAZINE** : Multi-play CD player (2 magazine type)
- 1 MAGAZINE** : Multi-play CD player (1 magazine type)

Press NO, and the SET UP MENU is canceled.

3. If the message displayed on the screen is as desired, press YES.
The operation display for the type of CD you selected appears on screen.
Pressing NO takes you back to procedure 2's display.

[FILE TYPE CD PLAYER]

Refer to the Fig. A.

SEARCH BY:

(DISC No., DISC TITLE, ARTIST NAME, GENRE (p. 44))

: Select when searching for a disc. When the CD player is in the ALL mode, only DISC No. SEARCH is possible.

MODE (SINGLE, ALL)

: To play only a single disc select SINGLE. For search and continuous play of all discs select ALL.

DISC ENTRY (p. 43)

: You can register the title, artist's name, track numbers, and genre of each disc (DISC INFORMATION).

You can also register the titles of CD tracks (MUSIC TITLE).

SET UP : Displays the CD SET UP MENU.

PROGRAM (PLAY, MEMORY) (p. 45)

: Select for programmed play.

RANDOM PLAY

: Select for random play.

■ : Stops playback.

⏏ : Pauses playback. Press again, and play starts.

▶ : Selects playback. Play starts from the first track of the disc indicated by the brightly lit number in the DISC LIST.

⏮ : Returns to the beginning of the track currently in playing.

⏭ : Advances to the next track.

PAGE ◀ ▶ : Turns pages listed at the bottom of the display.

* DISC No. buttons

: Press a desired disc No. button and play begins.

MUSIC LIST : Press this button, and the track titles of the currently selected disc is displayed. (Refer to the illustration below.)



DISC LIST : Press to return to the CD (FILE) operation display.

* TRACK No. button

: Press a desired track number button and play begins. Depending on the CD player mode, the first track may be heard briefly.

OPERATING CD PLAYER (GUI OPERATION)

[3/2/1 MULTI-PLAY CD PLAYER]



MAGAZINE 1/2/3

: Displays the identifying mark of the currently loaded magazine.

■ : Stops playback.

⏏ : Pauses playback. Press again, and play starts.

▶ : Selects playback. Play starts from the first track of the disc indicated by the brightly lit number in the DISC LIST.

⏮ : Returns to the beginning of the track currently in playing.

⏭ : Advances to the next track.

DISC ENTRY : You can register the title, artist's name, track numbers, and genre of each disc (DISC INFORMATION). You can also register the titles of CD tracks (MUSIC TITLE).

SET UP : Displays the CD SET UP MENU.

RANDOM PLAY

: Select for random play.

MUSIC LIST : Move the cursor to this button, press ENTER and the track titles of the currently selected CD are displayed. (See page 41)

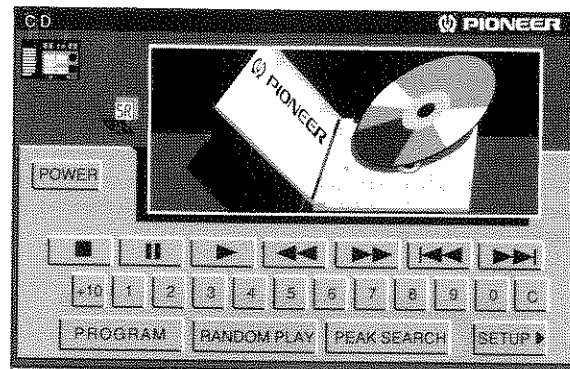
PAGE ◀ ▶ : Turns pages listed at the bottom of the display. Press ▶, and the currently loaded magazine is displayed first, after which display of magazines continues in alphabetical order.

When you turn a page, the mode changes to magazine entry, "MAGAZINE ENTRY" is indicated in the center of the display. When you have loaded a new magazine, select its name using the PAGE ◀ ▶ buttons, and select the magazine insertion slot No. for the selected magazine with the MAGAZINE ENTRY 1/2/3 buttons. MAGAZINE 1/2/3 indications at the top left of the display switch to the new magazine's name, and operation buttons are displayed.

* DIRECT SELECTION buttons

: Move the cursor to the disc you want to listen to, press ENTER, and it starts playing.

[SINGLE-TYPE CD PLAYER]



POWER

: Switches CD player power ON/OFF.

■ : Stops playback.

⏏ : Pauses playback. Press again, and play starts.

▶ : Selects playback.

⏮ : Selects fast backward.

⏭ : Selects fast forward.

⏮ : Returns to the beginning of the track currently in playing.

⏭ : Advances to the next track.

+10 : Use when selecting a track number higher than 10. For example, to select 15, press the "+10" button and then the "5" button. "+10" button cannot be used with some PIONEER CD players.

1—9, 0 : For direct selection of a track.

C (Clear) : Erase a memorized program.

PROGRAM : Use this when you want to enjoy CD programmed play.

RANDOM PLAY

: Select for random play.

PEAK SEARCH

: Use for PEAK SEARCH operation.

SET UP : Displays CD SET UP MENU.

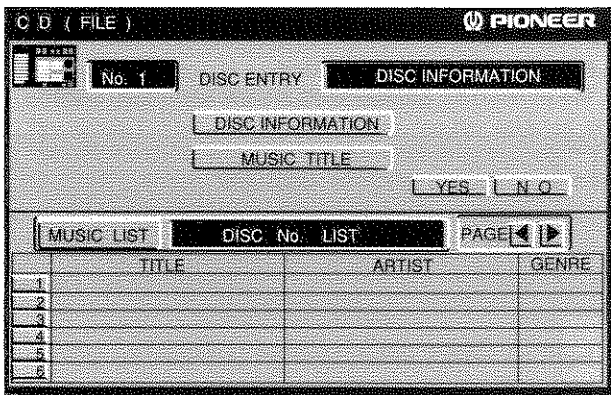
DISC ENTRY (EXCEPT FOR SINGLE-TYPE CD PLAYER)

- You can register the title, artist's name, track numbers, and genre of each disc (DISC INFORMATION).
- You can also register the titles of CD tracks (MUSIC TITLE).
- In the case of MAGAZINE-type CD player, information for 17 magazines can be memorized. With a File-type CD player, information for 100 discs can be memorized.

DISC INFORMATION

- On the CD operation display, search for the disc you want to register with the PAGE ◀▶ buttons, and press the DISC No. button.
 - When the disc whose DISC No. you selected is loaded, play starts. In the case of file-type CD player, you can find it quickly using DISC No. SEARCH. (p. 44)
- Press the DISC ENTRY button.

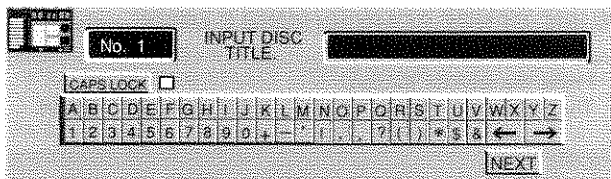
The DISC ENTRY display appears on screen.



- Select the DISC INFORMATION and press the YES button.

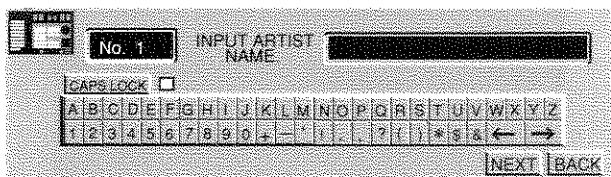
The INPUT DISC TITLE display appears on screen.

To cancel the DISC ENTRY display, press the NO button.



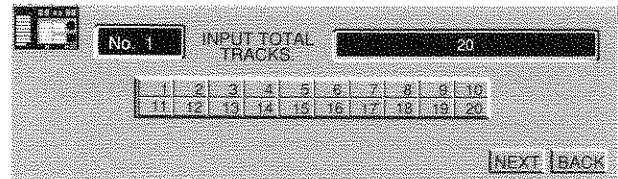
- Input the title with the displayed keyboard. For extra convenience, use this unit's MULTI-JOG.
 - Up to 20 letters can be registered.
 - When inputting lower case letters, press CAPS LOCK to off position (on the right side without the □ mark).
 - Press the ← → buttons to make a space on the left or right.
- Press the NEXT button.

The INPUT ARTIST NAME display appears on screen. (Press the BACK button to return to the INPUT DISC TITLE display.)



- Input the artist's name.
- Press the NEXT button.

The INPUT TOTAL TRACKS display appears on screen. (Press the BACK button to return to the INPUT ARTIST NAME display.)



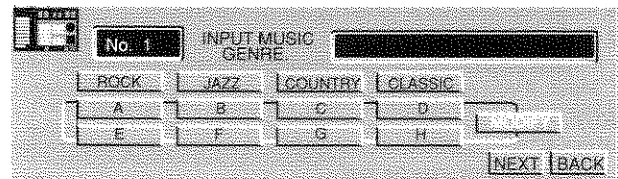
- Input the number of tracks on the CD.

A maximum of 20 can be input.

- Press the NEXT button.

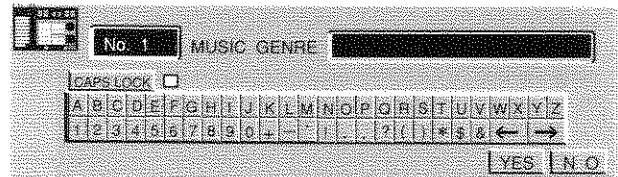
The INPUT MUSIC GENRE display appears on screen. (Press the BACK button to return to the INPUT TOTAL TRACKS display.)

When selecting one of the four registered genres (ROCK, JAZZ, COUNTRY, CLASSIC), continue from step 13. When registering a genre name in the A to H buttons, continue from step 10.



- (When registering a genre name) Select and press the button from A to H you want to register in.
- Press the MODIFY button.

The keyboard is displayed.



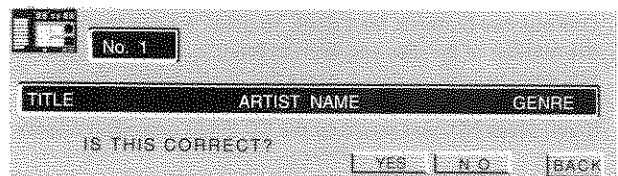
If you press NO, input information is not memorized, and you return to step 10's display.

- Input your desired genre name (up to 7 letters), and press YES.

The keyboard disappears.
- Select and press the genre you want to enter for a disc.
- Press the NEXT button.

The information you entered is displayed. If it is correct, press YES. (Memorization has completed and this returns you to the DISC ENTRY display.)

If you want to alter the information you entered, press the BACK button to return to the display which features the information you want to enter. You can also press NO to return to the DISC ENTRY screen without registering any of the information you entered.



OPERATING CD PLAYER (GUI OPERATION)

MUSIC TITLE

- On the DISC ENTRY display, select the MUSIC TITLE and press YES.
The keyboard is displayed.



- Input the first track title (Up to 20 letters).
- Press the NEXT button, and you move onto the next track.
Repeat procedures 16 and 17 until all track names have been input. If you press BACK, you return to the previous display.

NOTE:

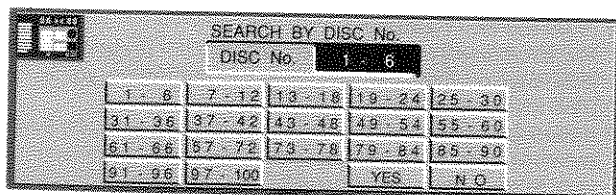
- If the AC cord is disconnected while you are inputting information, memorized data may be lost.
- If you press another operation button on this unit or on the remote control while inputting information, the information input up to that point is cleared from memory.

- When you have input the name of the last track, press the NEXT button, and there's a message. If you are ready to register the track names, press the YES button.
If you press NO, input information is not memorized, and you return to the DISC ENTRY display. If you press BACK, you return to the last song's DISC TITLE input display.

SEARCHING FUNCTION (FILE-TYPE CD PLAYER ONLY)

DISC No. SEARCH (SINGLE/ALL MODE)

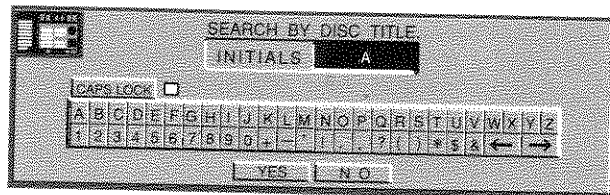
- On the CD (FILE) operation display, press a DISC No. button.
The SEARCH BY DISC No. display appears on screen.



- Select the disc you want to listen to, and press YES.
One number button is for 6 discs, so press the one that includes the number of the disc you want to listen to. For example, when you want to listen to disc 3, press the "1—6" button. For disc 23, press the "19—24" button.
If you press NO, you return to the CD (FILE) operation display.

DISC TITLE SEARCH (SINGLE MODE only)

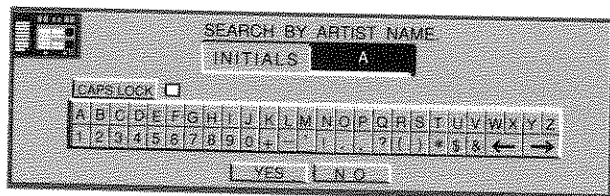
- Searches for disc titles memorized on the DISC ENTRY display.
- Press the DISC TITLE button.
The SEARCH BY DISC TITLE display appears on screen.



- Input the disc title initials with the displayed keyboard, and press YES.
When inputting lower case letters, press CAPS LOCK to off position (on the right side without the □ mark).
A list of discs that match will appear on the display.
If you press NO, you return to the CD (FILE) operation display.

ARTIST NAME SEARCH (SINGLE MODE only)

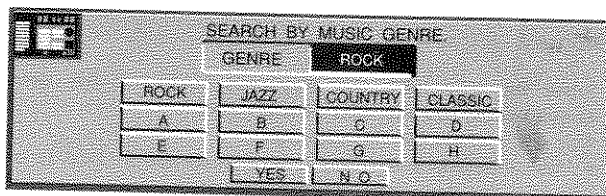
- Searches for artist names memorized on the DISC ENTRY display.
- Press the ARTIST NAME button.
The SEARCH BY ARTIST NAME display appears on screen.



- Input the artist's initials with the displayed keyboard, and press YES.
When inputting lower case letters, press CAPS LOCK to off position (on the right side without the □ mark).
A list of discs that match will appear on the display.
If you press NO, you return to the CD (FILE) operation display.

MUSIC GENRE SEARCH (SINGLE MODE only)

- Searches for musical genres memorized on the DISC ENTRY display.
- Press the GENRE button.
The SEARCH BY MUSIC GENRE display appears on screen.



- Select a genre, and press YES.
A list of discs that match will appear on the display.
If you press NO, you return to the CD (FILE) operation display.

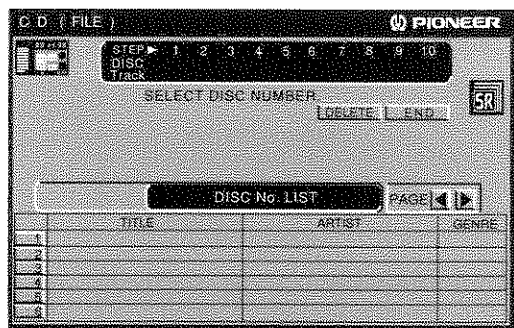
PROGRAM PLAYBACK — To program tracks in a desired order (FILE-TYPE CD PLAYER ONLY)

PROGRAM MEMORY

Programming in up to 10 steps is possible with 5 types of memory.

1. On the CD (FILE) operation display, press the **PROGRAM MEMORY** button.

The SELECT DISC NUMBER display appears on screen.



2. Search for the disc you want to register with the **PAGE** ◀ ▶ buttons, and press the **DISC No.** button.

The SELECT TRACK NUMBER display for the selected disc appears on screen.



3. Select a track. (If you select "ALL", all tracks on the disc are programmed.)

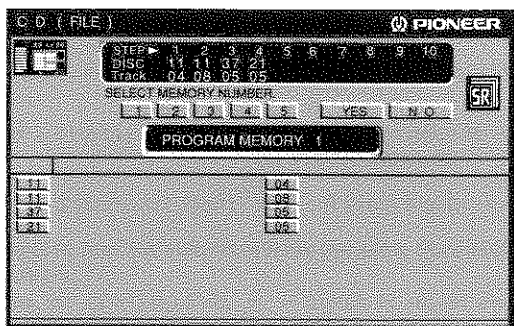
- You return to the SELECT DISC NUMBER display. Information programmed in step 1 is displayed.
- To continue programming, repeat steps 2 and 3.

DELETE PROGRAM

Press the **DELETE** button, and the information one step behind the current step, which has a flashing line under it, is cleared from memory.

4. When you have finished programming, press the **END** button.

The display changes to SELECT MEMORY NUMBER, the 1 to 5 number buttons are displayed.



5. Select and press the **MEMORY NUMBER** button for memorization.

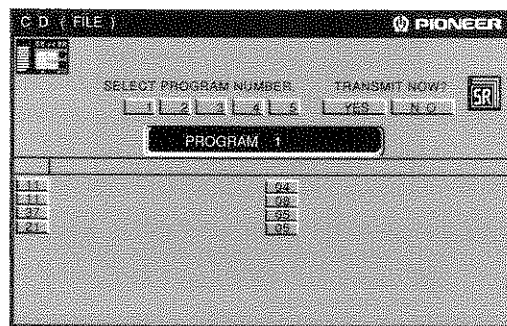
6. Press **YES**.

If you press **NO**, input information is cleared from memory, and you return to the CD (FILE) operation display.

PROGRAM PLAY

1. On the CD (FILE) operation display, press the **PROGRAM PLAY** button.

PROGRAM NUMBER buttons 1 to 5 are displayed. A list of PROGRAM 1 information is displayed.

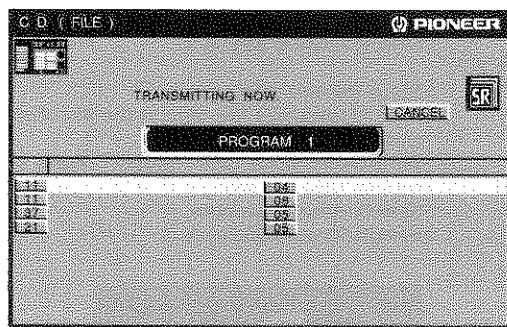


2. Press the number button (1 to 5) for the program you want to play.

Program information is displayed.

3. Press the **YES** button.

If you press **NO**, you return to the CD (FILE) operation display.



- Program data is sent to the CD player. When all the data has been received by the CD player, play begins automatically.

- When you want to stop data transfer part way through, press **CANCEL**. (Transmission is stopped part way through, and information that has been transmitted is cleared from memory.) If you press the **CANCEL** button once more, you return to the CD (FILE) operation display.

OPERATING OTHER COMPONENTS (GUI OPERATION)

First, select the component you want to operate on the MAIN MENU display.

1. Press the button for the component you want to operate with the input selector on the MAIN MENU display.

The ▷ mark moves to the right of the selected component.

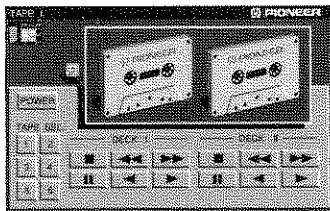
2. Press the same button once more.

Operation displays of various components are indicated.

NOTE:

To return to the MAIN MENU display from the operation displays of components, press the MAIN MENU icon at the upper left.

[TAPE 1]



When using a single cassette deck, use "DECK II" side.

POWER : Switches cassette deck power ON/OFF.
(This key cannot be used with some PIONEER cassette decks.)

TAPE SEL (1—6)

: Selects the cassette No. for multi-cassette changer.

<DECK I>

■ : Stops the tape transport.
 ◀▶ : Rapidly advances the tape in the direction of the arrow.
 ■ : Temporarily stops tape transport. Press again to resume tape transport.
 ▲ : Selects reverse playback.
 ▼ : Selects forward playback.

<DECK II>

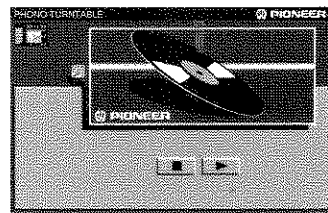
■ : Stops the tape transport.
 ▶▶ : Rapidly advances the tape in the direction of the arrow.
 ■ : Temporarily stops tape transport. Press again to resume tape transport.
 ▲ : Selects reverse playback.
 ▼ : Selects forward playback.

[LD]



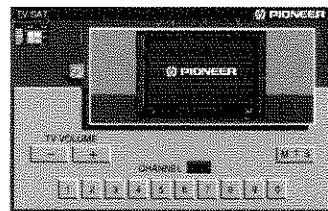
POWER : Switches LD player power ON/OFF.
SIDE A : Selects playback LD disc side A.
SIDE B : Selects playback LD disc side B.
DISC SEL : Selects the CD/CDV disc No. (1 to 5) for multi-play CD CDV LD players.
 ▲▲ : Selects fast backward.
 ▼▼ : Selects fast forward.
 ■ : Searches for the start of the chapter playing.
 ■ : Searches for the start of the next chapter.
 ■ : Playback is stopped when selected once. Selecting again causes the disc tray to come out.
 ■ : Video and audio are stopped and playback is paused.
 ▶ : Selects playback.
 +10 : Use to input such information as chapter numbers higher than 10.
 1—9, 0 : For direct selection of a chapter.

[PHONO] (Turntable)



■ : Stops playback.
 ▶ : Starts playback.

[TV/SAT]



TV VOL —, + : Raises and lowers the volume.

CHANNEL 1—9, 0

: Used to call up channels.

MTS : Selects the reception mode for multi-channel TV sound.

[VCR 1/VCR 2/VIDEO]



POWER : Switches VCR power ON/OFF.
CH + : Shifts channels in ascending order.
CH - : Shifts channels in descending order.
TV/VTR : This can be used only for VCRs with a TV/VCR selector. Toggles the antenna output between TV and VCR.
 ■ : Stops tape transport.
 ■ : Sets pause and still picture.
 ▶ : Starts playback.
 ▲▲ : Rewinds the tape and picture search.
 ▼▼ : Rapidly advances the tape and picture search.

S.F.C. (Sound Field Control) MODE OPERATION (GUI OPERATION)

SELECT THE S.F.C. MODE

1. Set **BALANCE** control on the unit to the center position, and set **BASS** and **TREBLE** as desired.
2. Switch the **GUI MODE** on, and select the front speakers you are going to use (A or B) on the **MAIN MENU** display.
3. Set **VOLUME** level, and **S.BASS** (Super Bass) to on or off as desired.
S.BASS cannot be used when the **DIRECT** button is on, so switch it off if you want **SUPER BASS**.
4. Press the **S.F.C. MODE** button on the **MAIN MENU**.



5. Select the desired mode from the 8 indicated on the left of the display.
The selected mode's operation indications are displayed.

9. Press the **TEST TONE** button to switch the test tone **OFF**.
10. Set the **EFFECT LEVEL** as desired with the **+**, **-** buttons.*3
You can adjust the **EFFECT LEVEL** in 8 steps from 10 to 80 using the **+** and **-** buttons.

NOTE:

- *1 You can select the **CENTER MODE** when using **DOLBY PRO-LOGIC SURROUND**, **PRO LOGIC THEATER**, and **DOLBY 3CH LOGIC**.
When using **DOLBY 3CH LOGIC**, you can switch between **NORMAL** and **WIDE** settings.
- *2 When using **DOLBY 3CH LOGIC**, **REAR** speakers are not used.
- *3 **EFFECT LEVEL** adjustment is only possible with **JAZZ**, **DANCE**, **HALL**, and **PRO LOGIC THEATER** modes.

OTHER ADJUSTMENTS

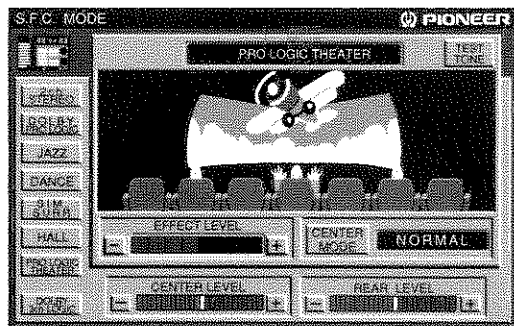
<DOLBY PRO-LOGIC SURROUND or SIMULATED SURROUND>
DELAY TIME **+**, **-**:



You can set the delay time in 2 ms steps between 16 ms and 30 ms. The standard setting is 20 ms, but you can select any setting of your choice.

LEVEL ADJUSTMENT

Example: When using **PRO LOGIC THEATER**



6. Press the **CENTER MODE** button to select the Center Mode.
(Refer to page 6)*1

→ NORMAL → WIDE → PHANTOM →

7. Press the **TEST TONE** button at the top right of the display to switch the test tone on.
The test tone is output from each of the speakers in the following order.

→ L (Front Left) → C (Center: except when in the PHANTOM mode) →
S (Surround: Rear) ← R (Front Right) ←

8. Adjust so that the volume level is the same from each of the speakers.
• Use the **CENTER LEVEL** **+**, **-** button to adjust the center speaker volume level.
• Use the **REAR LEVEL** **+**, **-** button to adjust the rear speakers volume level.*2

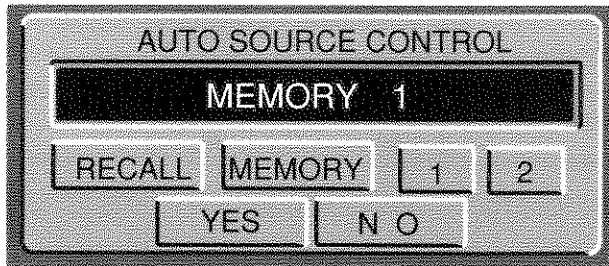
OTHER OPERATIONS (GUI OPERATION)

■ AUTO SOURCE CONTROL

You can memorize receiver settings and recall them at the press of a button. For details concerning functions, refer to page 26.

[Operation memory]

1. **Select the settings on the receiver you want to memorize.**
MULTI-ROOM & SOURCE and MUTING ON/OFF settings are not memorized.
2. **Press the AUTO SOURCE CONTROL button on the MAIN MENU to select the AUTO SOURCE CONTROL display.**
Opens the AUTO SOURCE CONTROL display.



3. **Press the MEMORY button.**
4. **Press button 1 or 2, depending on which you want to use for memorizing.**
5. **Press YES.**
This completes memorization. If you press NO, AUTO SOURCE CONTROL operation is canceled.

[Recalling]

1. **Press the AUTO SOURCE CONTROL button on the MAIN MENU to select the AUTO SOURCE CONTROL display.**
Opens the AUTO SOURCE CONTROL display.
2. **Press the RECALL button.**
3. **Select 1 or 2.**
Memorized information is displayed on the MAIN MENU.
4. **Press YES.**
Memorized information is displayed again. If you press NO, it is canceled.

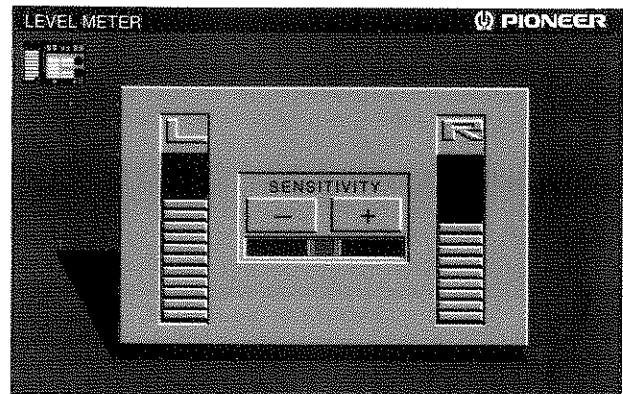
■ LEVEL METER

You can see on-screen left and right level indications.

1. **Press the LEVEL METER button on the MAIN MENU display.**
The LEVEL METER display appears on screen, with left and right meter level indications.
2. **When you want to adjust meter sensitivity, use the SENSITIVITY + and - buttons in the center to raise or lower sensitivity until the desired level is reached.**

NOTE:

Even if sensitivity is set to the highest level, the meter doesn't move unless the volume level is raised a little.



■ SCREEN SAVER

Press the SCREEN button on the MAIN MENU display ON, and the SCREEN SAVER operates. (This operates only when using the Audio function.) By eliminating continuous display of the same material on screen, this SCREEN SAVER prevents TV screen burn-in. On the main unit, when the audio function is GUI mode, if no operations are performed within 20 ~ 40 seconds*, the SCREEN SAVER switches ON automatically. You return to the original display as soon as you perform a GUI operation.

* In the following cases, the SCREEN SAVER does not operate even if you don't perform an operation after 20 ~ 40 seconds.

During SCAN operation of TUNER

: If a station that can be received is not found, until SCAN operation finishes (about 3 minutes)

During TUNER or CD memory operation

: Until the YES or NO button is pressed

When using ASC RECALL

: Until data transfer has finished

During TEST TONE operation

: Until the TEST TONE is switched OFF

During level meter display

: Until about 20 minutes have elapsed

During DEMO mode operation

: Until the demonstration has finished (about 10 minutes)

■ DIRECT

Press the DIRECT button on the MAIN MENU display, and you can listen to a source without passing the audio signal through sound quality and balance adjustment circuitry.

The surround mode, SUPER BASS, and rear and center speakers are automatically switched OFF.

■ DATA CLEAR

This erases all memorized CD and TUNER operation data.

NOTE:

All memorized CD data (DISC No., MUSIC GENRE, ARTIST NAME, DISC TITLE, MUSIC TITLE), and all memorized TUNER data (STATION No., STATION NAME, CATEGORY) is erased. Be sure to check data before erasing.

1. Press the CLEAR button on the MAIN MENU display.
The DATA CLEAR display appears on screen.
2. A message is displayed. If everything is correct, press the TUNING MODE MEMORY button on the main unit's front panel. When you don't want to erase data (when you want to cancel the DATA CLEAR display), press the MAIN MENU button at the upper left of the display.



TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
Power does not come on even when POWER switch is pressed.	• Power cord is disconnected. • Instances are rare, but the problem may be due to the operation of the protector circuit.	• Connect cord securely. • Unplug the power cord of the unit from the AC wall outlet, then plug it in again.
Control is not possible regardless of what operation button is pressed.	• Static electricity affected the unit when the air is dry, such as in winter.	• Unplug the power cord of the unit from the AC wall outlet, then plug it in again. • If static electricity is pronounced, it is recommended that you operate the unit using the remote control unit.
No sound is produced, even when the input selector button is selected.	• Connections are incorrect.	• Consult pages 7 — 14 and perform connections correctly.
	• The MUTING button is pressed.	• Press the MUTING button to cancel the MUTING effect.
	• VOLUME is turned down.	• Raise volume.
	• Speaker connecting wires are disconnected from speaker terminals.	• Connect wires to terminals securely.
	• One or both of the input cords are disconnected.	• Connect input cords securely.
	• TAPE 2 MONITOR button is in the ON position.	• Press the button again to the OFF position.
No picture is produced, even when the input selector button is selected.	• The SPEAKERS button is OFF.	• Switch the SPEAKERS button ON.
	• Connections are incorrect. • The V.SEL (VIDEO SIGNAL SELECTOR) is not set properly. • The VCR and the selected input selector button are not correct.	• Consult pages 7 — 14 and perform connections correctly. • Set correctly. • Press the correct button.
High noise level.	• Station has not been tuned in to correct frequency.	• Tune the station in correctly.
	• Antenna has not been connected or has become disconnected.	• Connect the antenna securely.
	FM reception • Accessory T-type antenna remains bundled up or it is not pointing in right direction.	• Stretch both ends of antenna taut and locate direction yielding optimum reception.
	• Weak broadcasting station signals.	• Replace accessory T-type antenna with outdoor FM antenna.
	AM reception • AM loop antenna is not pointing in right direction.	• Change the direction of AM loop antenna and find a position where reception is improved.
	• Weak broadcasting station signals.	• Erect outdoor AM antenna or connect ground wire.
	• Noise being picked up from this unit and other equipment (especially electrical appliances using motors or fluorescent lights).	• Turn off the appliances generating noise or remove them from vicinity of the stereo equipment. • Separate the loop antenna from the unit by some distance.
No auto stop.	• Input signals are not strong enough.	• (FM) If the T-type antenna is being used, change to an outdoor antenna.

Symptom	Cause	Remedy
TV source cannot be seen when the VCR's TV tuner is used.	• TV antenna is not connected to VCR, or connections are faulty.	• Consult the VCR's operating instructions, and connect antenna correctly.
	• You are attempting to watch a TV source using a VCR with copy system connections. In general, when copy system connections are made, the VCR's TV tuner function ceases to operate. For details, consult the operating instructions of your VCR.	• Disconnect the copy system connection (TV tuner function will operate).
Video tape copies cannot be made with the VCR.	• Video tape copy connections have not been made.	• Look again closely at the section BASIC VIDEO SYSTEM CONNECTIONS on page 9, and connect correctly.
No rear sound is produced.	• The SURROUND MODE switch is set incorrectly. • The REAR LEVEL is turned down. • Speaker connecting wires are disconnected from REAR SPEAKERS terminals.	• Set correctly. • Refer to page 47 and adjust the rear level. • Connect wires to terminals securely.
Remote control does not work.	• Batteries are dead or no batteries in remote control unit. • Poor angle or too great a distance from the remote sensor window. • There is an obstacle between you and the remote sensor window. • A fluorescent light is shining on the remote sensor window. • CONTROL MODE is not set for the component you want to operate. • You are pressing a button that does not transmit a signal.	• Insert new batteries. • Use within 7 meters and within a 30 degree angle of the remote sensor window. • Change your position or move the obstacle. • Move so fluorescent light does not shine directly on amplifier front panel remote sensor window. • Select the correct CONTROL MODE button and press. • Refer once more to page 29, and press a button that transmit a signal.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Amplifier section

Continuous average power output of 130 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.05% total harmonic distortion (front).**

Continuous Power Output

(Rear only driven) 100 W (1 kHz, 0.8 %, 4 Ω)
(Front and center driven)

Front 100 W + 100 W (1 kHz, 0.8 %, 8 Ω)

Center 100 W (1 kHz, 0.8 %, 8 Ω)

Dynamic Power (2 Ω /4 Ω) 300 W/290 W

Input (Sensitivity/Impedance)

PHONO MM 2.8 mV/47 k Ω

CD, TAPE 1, TAPE 2, LD,

VCR 1, VCR 2, VIDEO, TV/SAT 200 mV/47 k Ω

Phono Overload Level (T.H.D. 0.1 %, 1 kHz)

PHONO MM 100 mV

Frequency Response

PHONO MM 20 Hz to 20,000 Hz ± 0.3 dB

CD, TAPE 1, TAPE 2, LD,

VCR 1, VCR 2, VIDEO, TV/SAT 5 Hz to 100,000 Hz ± 0.5 dB

Output (Level/Impedance)

TAPE 1 REC, TAPE 2 REC 200 mV/2.2 k Ω

VCR 1 OUT, VCR 2 OUT 200 mV/2.2 k Ω

Tone Control

BASS ± 8 dB (150 Hz)

TREBLE ± 8 dB (10 kHz)

SUPER BASS ± 8 dB (80 Hz)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM 76 dB

CD, TAPE 1, TAPE 2, LD, VCR 1, VCR 2, TV/SAT, VIDEO 97 dB

Signal-to-Noise Ratio (EIA, at 1 W (1 kHz))

PHONO MM 77 dB

CD, TAPE 1, TAPE 2, LD, VCR 1, VCR 2, TV/SAT, VIDEO 80 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)

VCR 1, VCR 2, LD, VIDEO 1 Vp-p/75 Ω

Output (Level/Impedance)

VCR 1, VCR 2, MONITOR 1 Vp-p/75 Ω

Frequency Response

VCR 1, VCR 2, LD, VIDEO $\rightarrow$ MONITOR 5 Hz to 7 MHz ± 0.5 dB

Signal-to-Noise Ratio

PHONO MM 55 dB

Cross Talk

PHONO MM 55 dB

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz

Usable Sensitivity Mono: 11.2 dBf, IHF (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity Mono: 16.8 dBf, (1.9 μ V/75 Ω)

Stereo: 38.6 dBf, (23.3 μ V/75 Ω)

Signal-to-Noise Ratio Mono: 80 dB (at 65 dBf)

Stereo: 76 dB (at 85 dBf)

Distortion Mono: 0.2 % (1 kHz)

Stereo: 0.3 % (1 kHz)

Capture Ratio 1 dB

Alternate Channel Selectivity 65 dB (400 kHz)

Stereo Separation 45 dB (1 kHz)

Frequency Response 30 Hz to 15 kHz (± 0.5) dB

Image Interference Ratio 50 dB

IF Interference Ratio 80 dB

Antenna Input 300 Ω balanced

75 Ω unbalanced

AM Tuner Section

Frequency Range 531 kHz to 1,602 kHz (9 kHz step)

530 kHz to 1,600 kHz (10 kHz step)

Sensitivity (IHF, Loop antenna) 300 μ V/m

Selectivity 25 dB

Signal-to-Noise Ratio 50 dB

Antenna Loop antenna

Miscellaneous

Power Requirements

U.S. and Canadian models AC 120 V, 60 Hz

Multi-voltage model AC 110 V/120—127 V/220 V/240 V

(Switchable), 50/60 Hz

Power Consumption

U.S. and Canadian models 260 W, 340 VA

Multi-voltage model 950 W

In Standby Condition 3 W

AC Outlets

U.S. and Canadian models

SWITCHED x 2 TOTAL 100 W (0.8 A) MAX

UNSWITCHED x 1 100 W (0.8 A) MAX

Multi-voltage model

SWITCHED x 2 TOTAL 100 W MAX

UNSWITCHED x 1 100 W MAX

Dimensions 420 (W) x 162 (H) x 425 (D) mm

16-9/16 (W) x 6-3/8 (H) x 16-3/4 (D) in

Weight (without package) 13.0 kg (28 lb 2 oz)

Furnished Parts

FM T-type Antenna 1

AM Loop Antenna 1

Dry Cell Batteries

(size "AA" (IEC LR6/AM-3) Alkaline) 2

Remote Control Unit 1

Operating Instructions 1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

